# 2013

# West Virginia Behavioral Health Epidemiological Profile



West Virginia Bureau for Behavioral Health & Health Facilities

Mission: to improve the quality of life for West Virginians with behavioral health needs.

#### **Developed October 2013**

West Virginia Department of Health and Human Resources Karen L. Bowling, Cabinet Secretary

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U.S. Substance Abuse and Mental Health Services Administration (SAMHSA)

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CAMC Institute
Center for Health Services & Outcomes
Research
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Charleston, WV 25304
camcinstitute.org

First Choice Services, Inc 405 Capitol Street, Suite 103 Charleston, WV 25301 1stchs.com

Governor's Highway Safety Program 5707 MacCorkle Avenue, Southeast PO Box 17600 Charleston, WV 25317 www.transportation.wv.gov

West Virginia Bureau for Behavioral Health and Health Facilities 350 Capitol Street, Room 350 Charleston, WV 25301 www.wvdhhr.org/bhhf

West Virginia Bureau for Children and Families 350 Capitol Street, Room 691 Charleston, WV 25301 www.wvdhhr.org/bcf

West Virginia Bureau for Medical Services 350 Capitol Street, Room 2 Charleston, WV 25301 www.dhhr.wv.gov/bms West Virginia Bureau for Public Health
Office of Epidemiology and Prevention Services
350 Capitol Street, Room 125
Charleston, WV 25301
http://www.dhhr.wv.gov/oeps

West Virginia Bureau for Public Health Health Statistics Center 350 Capitol Street, Room 165 Charleston, WV 25301 www.wvdhhr.org/bph/hsc

West Virginia Bureau for Public Health
Office of Maternal, Child and Family Health
Division of Research, Evaluation and Planning
350 Capitol Street, Room 427
Charleston, WV 25301
http://www.wvdhhr.org/wvprams

West Virginia Coalition Against Domestic Violence 5004 Elk River Road, South Elkview, WV 25071 www.wvcadv.org

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Building 6, Room 309
1900 Kanawha Boulevard, East
Charleston, WV 25305
wvde.state.wv.us/healthyschools

West Virginia Department of Education
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Charleston, WV 25305
wvde.state.wv.us/research

West Virginia Division of Corrections 1409 Greenbrier Street Charleston, WV 25311 www.wvdoc.com/wvdoc

West Virginia Division of Justice and Community Services Office of Research and Strategic Planning Justice Center for Evidence Based Practice West Virginia Statistical Analysis Center 1204 Kanawha Boulevard, East Charleston, WV 25301 www.djcs.wv.gov/SAC

West Virginia Health Care Authority 100 Dee Drive Charleston, WV 25311 http://www.hca.wv.gov West Virginia Higher Education Policy Commission 1018 Kanawha Boulevard, East, Suite 700 Charleston, WV 25301 wvhepcnew.wvnet.edu

West Virginia National Guard Prevention, Treatment and Outreach 1700 MacCorkle Avenue, Southeast Charleston, WV 25314 www.wv.ngb.army.mil

West Virginia Poison Center
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Charleston Division
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Charleston, WV 25304
www.wvpoisoncenter.org

West Virginia Prescription (Rx) Abuse Drug Quitline 405 Capitol Street, Suite 103 Charleston, WV 25301 www.wvrxabuse.org

West Virginia State Police 725 Jefferson Road South Charleston, WV 25309 www.wvstatepolice.com

West Virginia Supreme Court of Appeals Building 1, Room E-100 1900 Kanawha Boulevard, East Charleston, WV 25305 www.state.wv.us/wvsca

## **Executive Summary**

#### **Purpose**

The West Virginia Department of Health and Human Resources, Bureau for Behavioral Health and Health Facilities (BBHHF), Division on Alcoholism and Drug Abuse is the designated Single State Authority (SSA) for substance abuse prevention and treatment activities in the state. The BBHHF administers the Substance Abuse Prevention and Treatment and Community Mental Health Block Grant Plan and Report that funds comprehensive behavioral health prevention, promotion, early intervention, treatment, and recovery programs statewide.

The West Virginia Behavioral Health Epidemiological Profile describes substance abuse consumption, consequences, risk and protective factors, as well as mental health issues in West Virginia. State and federal data sources were used to compile this document. The document is intended to serve as a single source reference for a variety of stakeholders and audiences seeking to obtain the most recent information related to substance abuse (alcohol, tobacco, and drugs) and mental health. It can also be used by prevention planners for interventions in high need areas. Some potential uses for this document are: applying for grant funds for substance abuse or mental health; surveillance; prevention program planning; and educational efforts. In line with SAMSHA's mission to reduce the impact of substance abuse and mental illness on America's communities, the intent is to continually update this document, based on the availability of data, to assist efforts to improve mental health and substance abuse outcomes.

## **Additional West Virginia Data Resources:**

The West Virginia Behavioral Health Epidemiological Profile contains data from a variety of state and federal sources. Other West Virginia data publications which are complementary to this document are:

- West Virginia Vital Statistics, 2010, West Virginia Bureau for Public Health, Health Statistics
   Center http://www.wvdhhr.org/bph/hsc/statserv/Pub.asp?ID=169
- West Virginia Behavioral Risk Factor Survey Report 2011, West Virginia Bureau for Public Health, Health Statistics Center <a href="http://www.wvdhhr.org/bph/hsc/pubs/brfss/2011/BRFSS2011.pdf">http://www.wvdhhr.org/bph/hsc/pubs/brfss/2011/BRFSS2011.pdf</a>
- Tobacco is Killing and Costing Us, 2005-2009, West Virginia Bureau for Public Health, Health Statistics Center <a href="http://www.dhhr.wv.gov/wvdtp/Resources/reports/Documents/K-CU-summary-2009.pdf">http://www.dhhr.wv.gov/wvdtp/Resources/reports/Documents/K-CU-summary-2009.pdf</a>
- WV Youth Tobacco Survey 2007 and 2009, West Virginia Bureau for Public Health, Health Statistics Center <a href="http://www.wvdhhr.org/bph/hsc/statserv/Pub.asp?ID=155">http://www.wvdhhr.org/bph/hsc/statserv/Pub.asp?ID=155</a>

#### **Introductions**

The data reported in this document are comprised of a variety of data sources related to substance consumption, related consequences, risk and protective factors, and mental health indicators. The data are organized by substance (alcohol, tobacco and drugs) and then by several mental health indicators (depression and psychological distress, suicide, homelessness, domestic violence, and sexual assault). A data source section of the report provides a description of the source, as well as information about who sponsors the data source, the geographic level of analysis available, and strengths and limitations of the data source. Each indicator section contains a description of the indicator. Also, there is a section explaining why each indicator is important.

## **Demographic Context**

West Virginia is the only state that is entirely located within the Appalachian region and its terrain is largely mountainous, leading to its nickname "the Mountain State." It is bordered by five states: Pennsylvania, Maryland, Virginia, Kentucky, and Ohio. According to the United States (U.S.) Census in 2012, West Virginia had an estimated population of 1,855,413. The 2000 U.S. Census estimated that 46% of the population lived in a rural area. Charleston, the state capitol, had the largest population in WV of approximately 51,000 (2012 Census estimate). Other large cities estimates for 2012 include Huntington (49,160), Parkersburg (31,261), and Morgantown (31,000). West Virginia had a low racial diversity with 94% of the population being White, 3.5% being Black or African American, 1.5% being two or more races, 0.7% being Asian, and 0.2% being American Indian and Alaska Native. According to the 2012 Census estimate 1.3% of West Virginians are of Hispanic origin which is much lower than the national rate of 16.9%. At 16.8%, West Virginia had a higher percentage of elderly (those 65 years and older) than the nation at 13.7% in 2012.

West Virginia is an economically disadvantaged state, with one of the lowest median household incomes in the United States. The U.S. Census also lists the median household income from 2007-2011 in West Virginia as \$39,550 compared to \$52,762 nationwide. Thus, West Virginia has a higher percentage of those living below the poverty level (17.5%) compared to the nation (14.3%).

According to the Bureau of Labor Statistics, West Virginia's annual average unemployment rate was 7.3% in May 2013, which is slightly lower than the national rate of 7.9%. In 2007-2011 West Virginia had a lower percentage (82.6%) of people 25 years and older who have a high school diploma or higher level of education than the national estimate (95.4%). Also, West Virginia had a lower rate of people 25 and older who completed a bachelor's degree or higher (17.6%) compared to the US average (28.2%). Eighteen percent of students in West Virginia are dropouts, meaning they are not enrolled in school and have not graduated from high school. The American Psychological Association has shown that education has a direct impact on a person's socioeconomic wellbeing. According to the United Health Foundation's Health

Rankings, which evaluates health determinants by state, West Virginia ranked 47th in 2012; it was 43rd in 2011. Challenges described in the United Health Rankings report included the state's high prevalence sedentary lifestyle, obesity and diabetes, smoking, and high rate of preventable hospitalizations in West Virginia.

## **Data Sources**

## Data Source: Alcohol Epidemiologic Data System (AEDS)

**Description**: The responsibility of the AEDS's task is to identify, acquire, maintain, and analyze alcohol-related epidemiologic data under the direction of the NIAAA. Data is on volume beverage and ethanol consumption in gallons which is collected for states as well as per capita ethanol consumption. Data are presented for beer, wine, spirits, and all three combined.

**Sponsored By**: National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institutes of Health (NIH)

Frequency: Data are collected and reported annually

**Geographic Level**: National, State

Strengths:

- Trend data available since 1990
- Collected consistently

#### Limitations:

- Lag-time in data reporting
- Data unavailable at the county level

Link to Source: <a href="http://pubs.niaaa.nih.gov/publications/datasys.htm">http://pubs.niaaa.nih.gov/publications/datasys.htm</a>

## Data Source: Alcohol-Related Disease Impact (ARDI)

**Data Description**: ARDI is an online application that provides national and state estimates of alcohol-related health impacts, including years of potential life lost (YPLL). These estimates are calculated for 54 acute and chronic causes using alcohol-attributable fractions, and are reported by age and sex. There are three different reports to estimate alcohol-related deaths due to alcohol consumption in ARDI: Alcohol-Attributable Deaths which estimates the total number of deaths attributable to alcohol; Years of Potential Life Lost which estimates the total number of alcohol-related years of life lost resulting from premature death; Alcohol-Attributable Fractions which estimates the proportion of deaths from various causes that are attributable to alcohol.

Sponsored By: CDC

**Geographic Level**: National, State **Frequency**: Five year average

#### Strengths:

- Provides alcohol-attributable mortality estimates across a number of diseases
- West Virginia specific alcohol related deaths are available by gender and age groups

#### Limitations:

- Based on self-report data from BRFSS (Behavioral Risk Factor Surveillance System)
- BRFSS prevalence estimates are based on alcohol use during the past 30 days; former drinkers are not included in the calculations

Link to Source: <a href="http://apps.nccd.cdc.gov/DACH">http://apps.nccd.cdc.gov/DACH</a> ARDI/Default/Default.aspx

## Data Source: Behavioral Risk Factor Surveillance System (BRFSS)

**Description**: The BRFSS is a cross-sectional telephone survey of adults conducted by the West Virginia Bureau for Public Health's Health Statistic Center with technical and methodological assistance provided by the Centers for Disease Control and Prevention (CDC). Every year, more than 5,000 West Virginians are randomly selected to participate in a telephone survey using a standardized questionnaire to determine the health practices of West Virginia residents. The data are collected by West Virginia and are sent to CDC, where monthly data are compiled for each state. At the end of the year the sample data are weighted to reflect the sociodemographic profile of West Virginia.

**Sponsored by:** CDC and the West Virginia Health Statistics Center (VSS)

Geographic level: National, State, and County

**Frequency**: Data collected monthly and reported annually

#### Strengths:

- Standardized and comparable across states
- Trend data available since 1984
- Starting in 2009, a smaller cell phone sample is conducted since the majority of younger adults may not have land lines

#### Limitations:

- Adults only
- Only civilian, non-institutionalized persons are eligible for the survey
- Self-report/response bias

Link to source: www.wvdhhr.org/bph/hsc/statserv/brfss.asp

## **Data Source: CDC WONDER Online Database**

**Description**: The CDC WONDER online database contains vital population counts for the United States (mortality, birth, AIDS public use data, cancer registry, etc.). Counts and rates of death can be obtained by underlying cause of death, state, county, age, race, sex, and year.

Sponsored by: CDC

Geographic Level: National, State

Frequency: Data collected and reported annually

#### Strengths:

- Standardized and comparable across states
- Uses the International Classification of Diseases(ICD) for consistency
- Trend data available since 1979

#### Limitations:

• ICD-10 codes differ from ICD- 9 codes

Link to Source: wonder.cdc.gov

## **Data Source: Fatality Analysis Reporting System (FARS)**

**Description**: A nationwide census providing data regarding fatal injuries suffered in motor vehicle traffic crashes. The data is used to assist the traffic safety community in identifying traffic safety problems, developing and implementing vehicle and driver countermeasures, and evaluation of motor vehicle safety standards and highway safety initiatives. FARS contains census data of all fatal traffic crashes in West Virginia and all 50 states, the District of Columbia, and Puerto Rico.

**Sponsored by**: National Center for Statistics and Analysis (NCSA), National Highway Traffic Safety Administration (NHTSA), US Department of Transportation (DOT)

Geographic level: National, State

Frequency: Data collected within 30 days of crash

Strengths:

- Standardized and comparable across states
- Trend data available since 1990

#### **Limitations:**

Includes fatalities only, not all crashes from impaired driving

Link to source: www.nhtsa.gov/FARS

## Data Source: National Survey on Drug Use and Health (NSDUH)

**Description**: The NSDUH serves as the primary source of information on the prevalence and incidence of illicit drug, alcohol, and tobacco uses in the civilian non-institutionalized population aged 12 and older in West Virginia and all 50 states. The survey is conducted using a telephone computer-assisted interviewing methodology.

**Sponsored by**: Substance Abuse and Mental Health Services Administration

**Geographic level**: National, State

**Frequency**: Annually (for analyses two years of data are combined)

Strengths:

- Trend data is available
- Standardized data collection nationwide

#### Limitations:

- The survey excludes data from active duty military personnel, persons living in institutional group quarters, prisoners, persons in drug use treatment centers, and homeless persons not living in a shelter
- No demographic breakdown of data available

Link to Source: nsduhweb.rti.org

## Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

**Description**: West Virginia PRAMS is a joint research project between the West Virginia Department of Health and Human Resources Office of Maternal, Child and Family Health and the Centers for Disease Control and Prevention (CDC). The project is an on-going, populationbased surveillance system designed to identify maternal attitudes and experiences before, during and after pregnancy. PRAMS is a survey-based system that collects information from women concerning their experiences before, during and after pregnancy. PRAMS asks women questions concerning a variety of topics, examples include: family planning, prenatal care, maternal risk factors, and maternal and infant health.

**Sponsored by:** CDC and West Virginia Bureau for Public Health

**Geographic Level**: National, State

Frequency: Annual

Strengths:

- Standardized data collection
- Trend data available since 2000
- Comparable across states

#### Limitations:

- Not all questions asked are comparable across states
- Self-report/response bias

Link to Source: www.cdc.gov/PRAMS/index.htm or http://www.wvdhhr.org/wvprams/

## Data Source: Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC)

**Data Description**: SAMMEC is an on-line software application available through CDC. It provides estimates for annual smoking-attributable deaths, years of potential life lost, smokingattributable healthcare expenditures, and productivity losses (of those who die prematurely) for adults in the United States, individual states, and user-defined populations.

The SAMMEC program derives smoking-attributable mortality (SAM) using smokingattributable fractions (SAFs) of deaths for 19 diseases where cigarette smoking is a cause, and calculations using sex-specific smoking prevalence and relative risk (RR) of death data for current and former smokers aged 35 and older.

Sponsored by: CDC

**Geographic Level: State** 

Frequency: The user determines the frequency. The CDC produces its own state-by-state and national SAMMEC report every 3-5 years. See <a href="http://www.cdc.gov/mmwr/">http://www.cdc.gov/mmwr/</a>

#### Strengths:

• SAMMEC is one of the few economic estimation programs used to provide mortality and economic costs.

- The economic models used in SAMMEC resulted from research conducted several decades ago.
- SAMMEC estimates should only be applied to larger populations (state-level) and may require several years of data.

Link to Source: <a href="http://apps.nccd.cdc.gov/sammec/about-sammec.asp">http://apps.nccd.cdc.gov/sammec/about-sammec.asp</a>

### **Data Source: <u>State Health Facts</u>**

**Description**: Statehealthfacts.org is a project of the Henry J. Kaiser Family Foundation and is designed to provide easy to use health facts for all 50 states and the District of Columbia. Statehealthfacts.org provides data on more than 700 health topics and is linked to both the Kaiser Family Foundation and the Kaiser Health News. The data come from both public and private sources, including the Henry J. Kaiser Family Foundation (KFF) reports, public websites, government surveys and reports, and private organizations. The data related to the number of prescription drugs filled at retail pharmacies only are data from a panel of retail pharmacies, third party payers, and data providers. Retail pharmacies include independent pharmacies, chain pharmacies, food stores, and mass merchandisers found in 814 defined regional zones.

**Sponsored by:** The Henry J. Kaiser Family Foundation (KFF)

Geographic Level: National, State

Frequency: Varies between health topics

Strengths:

• Provides easy to use, comparable data for all 50 states

#### Limitations:

- Provides only the most up-to-date data available; trend data is not available from website, but may be requested.
- Excludes mail order pharmaceutical sales.

**Link to Source**: www.kff.org

## **Data Source: Treatment Episode Data Set (TEDS)**

**Description:** TEDS is the only national patient level database on substance abuse treatment. TEDS annually receives 1.8 million admissions for treatment of abuse of alcohol and drugs from facilities that report to state administrative data systems.

Sponsored by: Office of Applied Studies, Substance Abuse and Mental Health Services

Administration (SAMHSA)

Geographic level: National, State

Frequency: Annual

Strengths:

- Standardized and comparable across states
- Trend data available since 1992.

- Counts are by admissions, not by individuals; meaning an individual admitted multiple times during the year is counted every time they are admitted.
- Only the primary admission substance is counted.
- Time lag in reporting among some states.
- Does not capture data on facilities operated by Federal agencies (Bureau of Prisons, Department of Defense, and the Veterans Administration)

Link to Source: http://wwwdasis.samhsa.gov/dasis2/teds.htm

## Data Source: Uniform Billing Database (UB)

**Data Description**: The Uniform Billing Database is an online tool for identifying, tracking, and analyzing West Virginia hospital statistics. Uniform Billing Database is collected by the West Virginia Health Care Authority. These statistics are based on "community hospitals," defined as nonfederal, short-term, general and other specialty hospitals, including public hospitals and academic medical centers.

**Sponsored by:** West Virginia Health Care Authority

**Geographic Level**: State

Frequency: Annual

Strengths:

• Includes data on all inpatient discharges from non-federal hospitals in West Virginia

#### Limitations:

- Data is used primarily for administrative purposes rather than epidemiological analyses
- Excludes federal, rehabilitation, and psychiatric hospitals, as well as alcoholism/chemical dependency treatment facilities.

Link to Source: http://www.hca.wv.gov/data/requestdata/Pages/default.aspx

## Data Source: Vital Statistics System (VSS)

**Description**: Mortality information is collected from death certificates registered with the Health Statistics Center and includes personal identifiers, demographic characteristics of the deceased, cause and manner of death, and other information regarding the death. Data are collected on all deaths that occur in West Virginia and, through interstate exchange, for West Virginia residents who die out of state. State data are also reported to the National Center for Health Statistics at the CDC. The Vital Statistics System also include birth outcomes data collected from birth certificates registered with the Health Statistics Center as well as fetal death, marriage, and divorce data.

Sponsored by: West Virginia Health Statistics Center

**Geographic Level**: State, County

Frequency: Collected daily and reported annually

Strengths:

- Collected consistently by the state
- Complete coverage of vital events
- Underlying and multiple causes of death available beginning with 2012 data

- Time lag in receiving West Virginia resident death information from other states
- Information regarding some deaths in which drugs played a contributory role may be obscured by the actual cause of death

Link to Source: www.wvdhhr.org/bph/hsc/vital

## Data Source: West Virginia Coalition Against Domestic Violence (WVCADV)

**Data Description**: WVCADV is a uniform database that all 14 licensed domestic violence programs in West Virginia use. The WVCADV database provides detailed data surrounding all aspects of services provided by licensed domestic violence programs across the state and captures a profile of the servicers (survivors/abusers). Data collected is used in developing public policy talking points, serves as a base for public awareness messaging, and guides the coalition in addressing unmet needs and gaps in services.

Sponsored By: West Virginia Coalition Against Domestic Violence

**Geographic Level**: State, County

**Frequency**: Aggregate data is submitted to the coalition on a monthly basis

#### Strengths:

- Database is uniform across all 14 licensed programs
- Consistent field definitions based on federal grant definitions
- User friendly and can be adapted through the creation of queries and reports for specific needs

#### Limitations:

- Data is limited as information captured is reliant upon what the survivor is willing to share
- Substance abuse information is not collected on survivors.
- Local program staff turnover may reduce the uniformity in reporting practices and definitions because of their lack of training

## **Data Source: West Virginia Coalition to End Homelessness**

**Data Description**: The West Virginia Coalition to End Homelessness, in partnership with the WV State HMIS Network, helps to maintain a database on sheltered homelessness including: disability, substance abuse, and severe mental illnesses. This database also contains information on bed availability, number of beds occupied, and type of beds occupied, currently in 50 counties of West Virginia. In 2014, the database will encompass all counties in WV.

**Sponsored By:** The West Virginia Coalition to End Homelessness

**Geographic Level**: State, County

Frequency: Live database

Strengths:

Real-time data

 Collects unique data on a sensitive population that is at high risk for substance abuse and mental illness

#### Limitations:

Does not contain the number of individuals turned away due to substance abuse or mental illness

## Data Source: West Virginia Incident-Based Reporting System (WVIBRS)

Data Description: WVIBRS is the modernized version of the Uniform Crime (UCR) Program utilized by law enforcement. Details about every single crime occurrence are recorded in WVIBRS as opposed to the summary counts available through the UCR.

Sponsored By: WV State Police **Geographic Level**: State, County

Frequency: Annual

Strengths:

- Collects data on every single crime incident and arrest within 22 crime categories including: DUI, drug/narcotic violations, and drug equipment violations
- Entire state is represented
- Dynamic data set where information can be continuously updated within a fairly wide time window

#### Limitations:

- Four month lag time in reporting data
- Reporting can be inconsistent over time across agencies
- Missing data is not accounted for in the state system

## Data Source: West Virginia Juvenile Justice Database (WVJJDB)

Data Description: The West Virginia Juvenile Justice Database is used by West Virginia juvenile probation offices to provide statistical information on the juvenile offenders and offenses in an effort to facilitate sound policy and case-level decision, fair resource allocation and appropriate program development.

Sponsored By: Maintained by the Division of Probation Services of the West Virginia Supreme Court of Appeals

Geographic Level: State, County

Frequency: Annually

Strengths:

• State and county level data is consistent and uniform across the state, capturing key information on juvenile offenses.

 Data is limited to information provided by West Virginia juvenile probation; juvenile probation cases not entered into the web-based system are not included.

## Data Source: <u>West Virginia Office of Epidemiology and Prevention Services</u> (OEPS)

**Data Description**: The Office of Epidemiology and Prevention Services is part of the West Virginia Bureau for Public Health, and consists of eight divisions which collect various surveillance data including: infectious disease epidemiology, immunization services, informatics, hemophilia, cancer epidemiology, STD, HIV & hepatitis, and tuberculosis.

- The West Virginia Electronic Disease Surveillance System (WVEDSS) is a web-based electronic reporting system; this system supports the surveillance of most infectious diseases including hepatitis B and C
- The STD Management Information System (STD-MIS) is a CDC provided electronic surveillance system which supports the surveillance of certain bacterial STDs including HIV and AIDS

Sponsored By: West Virginia Bureau for Public Health

Geographic Level: State, County

Frequency: Live databases

#### Strengths:

- Reporting of infectious diseases by the health care providers and facilities is required by WV Code 16-3-1; 64CSR7
- Consistent statewide surveillance systems
- Trend data available

#### Limitations:

- Behavioral risk factors are rarely reported on hepatitis surveillance forms; therefore it cannot be determined which hepatitis C cases are attributed to intravenous drug use
- Due to of passive surveillance, cases of hepatitis C are not recognized or reported, underestimating the burden of disease and related risk factors

## Data Source: West Virginia Poison Center (WVPC) Database

**Data Description**: The West Virginia Poison Center collects data from incoming calls to the center. The database collects data from exposure and information calls. Data can be used to identify overdose trends and emerging drugs of abuse.

**Sponsored by**: West Virginia Poison Center

Geographic Level: State, Local

Frequency: Real-time data available

#### Strengths:

- Trend data readily retrievable from 2003 (data collected since 1980)
- National and State monitoring
- Exposure information and information calls are collected
- Common definition for data fields that have been well established on a national level and accuracy ensured via daily quality assurance activities
- Reports are from callers via telephone; this added layer of confidentiality may increase likelihood of reporting.

#### Limitations:

- Not all poisoning exposures are reported
- Some events are less likely to initiate poison center contact; for example a substance abuse death which occurs shortly after exposure or exposure to a common opiate such as heroin
- Only coded data fields are searched electronically; text fields require manual review on a case by case basis
- It is not bedside patient evaluation; the data is only as good or accurate as what is provided to the WVPC staff

## Data Source: West Virginia Prescription Drug Abuse Quitline (WVPDAQ)

**Data Description**: WVPDAQ was developed to specifically assist individuals to determine their prescription drug quitting needs. Phone educators are highly trained in crisis and addictions. The WVPDAQ is an online database that contains all the qualitative and quantitative information collected by the WVPDAQ educators. When an individual calls into the Quitline, a WVPDAQ survey is collected in order to help serve the caller and provide trends.

Sponsored By: The West Virginia Education Fund

Geographic Level: State, Region

**Frequency**: Data is collected on a caller-by-caller basis. An intake survey is conducted during the initial phone call to WVPDAQ. After the initial call, three follow up surveys are scheduled. Since opening in 2008, WVPDAQ has served over 1,500 callers.

### Strengths:

- Survey design was based on peer-reviewed, published research on the quality and effectiveness of public health intervention hotlines
- Data provides unique insight into prescription drug abuse that no other survey provides

#### Limitations:

- Based on self-report, report bias
- The surveys were voluntary; therefore county data was not available because of insufficient data collection on county of residence

## **Data Source: West Virginia Synar Program**

**Data Description**: Under the Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act (P.L. 102-321), which includes the Synar Amendment (section 1926), states are required to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years of age. In order to comply with this legislation, West Virginia conducts annual, random, unannounced inspections of retail tobacco outlets and reports the findings to the U.S. Department of Health and Human Services (DHHS).

**Sponsored By**: Substance Abuse and Mental Health Administration (SAMSHA) and the Bureau for Behavioral Health and Health Facilities (BBHHF)

**Geographic Level**: State **Frequency**: Annual

#### Strengths:

- Trend data available since 1997
- Measures progress in reducing youth access to tobacco
- Compliance checks are conducted uniformly from county to county

#### Limitations:

• Data is unable to track repeat retail violations across the state

## **Data Source: West Virginia Traffic Accident Database (WVTAD)**

**Data Description**: The Governor's Highway Safety Program collects data from the West Virginia Traffic Accident database and the West Virginia Traffic Engineering Division of the Division of Highways. Data from the Governor's Highway Safety Program is used to plan traffic crash intervention programs. In addition, these programs target resources to police agencies to conduct various enforcement campaigns. The West Virginia Traffic Accident Database collects data from police officers who investigate traffic crashes through the state mandated traffic accident form which provides the state with data relating to all traffic crashes occurring on the state highway system.

**Sponsored By**: The West Virginia Traffic Engineering Division of the Division of Highways **Geographic Level**: State

**Frequency**: Annual, partial year data available upon request

#### Strengths:

- Real-time data
- Trend data available since 2000

#### Limitations:

The inability to guery data

## Data Source: West Virginia Youth Tobacco Survey (YTS)

**Data Description**: The YTS is an evaluation tool for West Virginia's State Tobacco Prevention Program. The YTS is a school based survey that collects data from young people in grades 6

through 12. The data provides information on many key intermediate and long-term tobacco related indicators.

Sponsored by: The West Virginia Division of Tobacco Prevention and the West Virginia

Department of Education and the CDC

**Geographic Level**: State **Frequency**: Biannually

Strengths:

- Tailored questionnaire to state's unique tobacco control program
- Trend data available
- Data that measure components of CDC's best practices for tobacco control programs

#### Limitations:

- Only public middle schools and high school students (grades 6-12) are eligible to participate
- Self-report/response-bias

Link to Source: www.cdc.gov/tobacco/datastatistics/surveys/yts

## Data Source: Youth Risk Behavior Surveillance System (YRBS)

**Description**: The YRBS is a national survey administered to monitor six types of health-risk behaviors that contribute to the leading causes of death and disability among youth and adults including: tobacco use, alcohol and other drug use, unhealthy dietary behaviors, physical activity, sexual risk behaviors, and behaviors that contribute to unintentional injuries and violence. The YRBS includes a national school-based survey conducted by the CDC that is administered to students in grades 9 through 12. The survey collects information on youth risk behaviors.

**Sponsored by:** CDC and West Virginia Department of Education

**Frequency**: Bi-annually

Strengths:

• Trend data since 1991

• Standardized survey across states

#### Limitations:

- Self-Report/response-bias
- County level data is not available

Link to Source: www.cdc.gov/healthyyouth/yrbs/index.htm

## **Summary of Key Findings**

## **Consumption of Substances**

#### Alcohol

- West Virginia was ranked as the second lowest state for current alcohol use, binge drinking, and heavy drinking in the nation in 2011 (BRFSS).
- 12th grade students (46%) in West Virginia are significantly more likely to have consumed alcohol within the last 30 days than 9th and 10th grade students (29.6%, 28.1%) (YRBS).
- 12<sup>th</sup> grade students in West Virginia were significantly more likely to binge drink (28.4%) than 9<sup>th</sup> and 10<sup>th</sup> grade students (17.1%, 15.5%) (YRBS).
- Adult males in West Virginia had a significantly higher percentage of binge drinking than adult females (BRFSS).
- Male high school students in West Virginia reported a significantly higher percentage
   (22.8%) of first use of alcohol before the age of 13 than females (15.6%) in 2011 (YRBS).
- In 2011, 12<sup>th</sup> grade students had a significantly higher percentage of driving a car after drinking alcohol than 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> grade students (YRBS).
- Male high school students have a significantly higher percentage of driving after drinking alcohol than female students in 2011 (YRBS).

#### Tobacco

- West Virginia had the second highest prevalence of current smoking among adults in the nation in 2011 (BRFSS).
- Adults with less than a high school education had a significantly higher prevalence of current smoking than adults with an education higher than high school (BRFSS).
- West Virginia had the fourth highest current smokeless tobacco prevalence in the nation and the third highest current smokeless tobacco prevalence among males in the nation in 2011 (BRFSS).
- Among pregnant women who smoked three months before pregnancy 65.7% smoked the last three months of pregnancy in 2010 (PRAMS).
- The percentage of low birth weight infants was significantly higher among those who reported smoking the last three months of their pregnancy from 2005-2010 (PRAMS).

#### Drugs

- In 2011 high school students in the 12<sup>th</sup> grade in West Virginia were significantly more likely to have reported using marijuana in past 30 days than 9<sup>th</sup> and 10<sup>th</sup> and 11<sup>th</sup> grade students (YRBS).
- Male high school students (24.2%) in West Virginia were significantly more likely to have used marijuana in the past 30 days than females (15.1%) in 2011 (YRBS).
- Male high school students (3.8%) in West Virginia reported a significantly higher percentage of use of cocaine in the last 30 days than female high school students (1.2%) (YRBS).
- Opioid single ingredient became the leading drug exposure reported to the West Virginia Poison Center in 2010.
- The leading prescription drug reported to the West Virginia Prescription Drug Abuse Quitline was oxycodone (31.8%) in 2012.
- Male high school students in West Virginia reported a significantly higher percentage of lifetime use of cocaine, heroin, methamphetamine, ecstasy, using steroid pills or shots, and use of any drugs via injection than female high school students in 2011 (YRBS).
- West Virginia has had a higher annual per capita of retail prescription drugs filled at pharmacies compared to the United States annual per capita from 2008-2011 (State Health Facts).
- Male high school students in West Virginia reported a significantly higher percentage (10.6%) of first use of marijuana before the age of 13 than female high school students (4.3%) (YRBS).

## **Consequences Resulting from Substance Abuse**

#### Alcohol

- In West Virginia males had a significantly higher age-adjusted death rate from chronic liver disease and cirrhosis than females in West Virginia for each year and for the combined years 1999-2010 (VSS).
- Males in West Virginia had a significantly higher age-adjusted death rate from alcohol induced causes than females for each year and combined years 1999-2010 (VSS).
- The leading alcohol-attributable deaths due to excessive alcohol use for all ages in West Virginia from chronic causes are alcoholic liver disease and liver cirrhosis unspecified, and from acute causes such as motor-vehicle traffic crashes and suicide (ARDI).
- In 2011, 26.9% of persons killed in crashes in West Virginia were by drivers with a blood alcohol concentration (BAC) of 0.08 or higher, which was lower than the national rate of 30.6% (FARS).
- Males accounted for 76.4% of all of the alcohol related diagnosis discharges and 77.5% of all the alcohol dependence related diagnosis discharges in West Virginia in 2011 (UB).

• The West Virginia Department of Motor Vehicles (WVDMV) reported that there were 11,079 driving under the influence revocations in West Virginia in the 2012 fiscal year.

#### **Tobacco**

- During the years 2006-2010, the estimated annual direct health care costs caused by deaths and illnesses from smoking were \$709 million (VSS).
- About 19% of all deaths (or nearly 1 in 5 deaths) of West Virginia adults aged 35 and older were caused by cigarette smoking (2006-2010). Due to smoking-related premature deaths these years, over 55,000 years of potential life (YPLL) were lost annually. This averages out to 14.6 years of lost life to smokers (WVHSC, SAMMEC).
- West Virginia has had a higher age-adjusted rate of death for lung/bronchus/trachea cancers, COPD, and emphysema from 1999 to 2010 than the national rate (VSS).
- Males had a significantly higher age-adjusted death rate than females for lung/bronchus/trachea cancers, COPD and emphysema for the combined years for 1999-2010 (VSS).

#### **Drugs**

- Discharges with a drug related diagnosis have steadily increased from 363.7 per 10,000 discharges in 2007 to 506.5 per 10,000 discharges in 2011 (UB).
- The rate per 100,000 population of acute hepatitis C has more than tripled from 2007 to 2012 (0.8 in 2007 to 3 in 2012) in West Virginia (OEPS).
- In 2012, 7% of reported HIV/AIDS cases in West Virginia were intravenous drug users (OEPS).
- West Virginia has had higher age-adjusted death rate than the nation for drug overdoses and poisonings from 2000 to 2010 (VSS).
- There was a significant increase between the age-adjusted death rate in 1999 to 2010 for West Virginia and for both genders for drug overdoses and poisonings and non-prescription drug overdoses and drug-induced causes (VSS).
- Other opiates accounted for the highest percentage of treatment admissions in West Virginia in 2010 (34.9%), which was four times higher than the national percentage (8.7%).
- The number of drug violation arrests in 2011 increased over 40% from 2004 (WVIBRS).

## **Factors Contributing to Substance Abuse**

#### <u>Alcohol</u>

- Female high school students in West Virginia were significantly more likely to obtain alcohol by someone giving it to them in 2007-2011 (YRBS).
- Persons aged 18 to 25 years in West Virginia and in the United States reported having the lowest perceived risk of having five or more alcohol beverages once or twice a week compared to those 12-17 and 26 and older (NSDUH).

#### Tobacco

- The Synar violation rate for the sales or distribution of tobacco products to individuals under the age of 18 in West Virginia was 13.5% in 2012 (WVBHHF, WVHSC).
- During 2000 to 2011, over 30% of West Virginia's underage current smokers reported obtaining cigarettes by "giving money to someone else to buy them for me," this was significantly higher than any other method (WVYTS).

#### Drugs

- According to the West Virginia Prescription Drug Abuse Quitline, the most common responses for where respondent's indicated that they obtained their prescription drugs in 2012 were: buy on the street (86.9%), legitimate prescription (40.2%), and buying from family or friend (33.3%).
- The reported perception of harm from smoking marijuana was lowest among those aged 18-25 in West Virginia and in the United States compared to those 12-17 and 26 and older (NSDUH).

#### **Behavioral Health**

- From 2007 to 2011 females high school students in West Virginia were significantly more likely than males to feel sad or hopeless (YRBS).
- West Virginia had a significantly higher percentage of depression among adults than the nation in 2011.
- Adults in West Virginia reported a higher rate of any mental illness and serious mental illness in the past year than the United States between the years 2008-2011 (NSDUH).
- Adults in West Virginia reported a higher prevalence of having serious thoughts of suicide in the past year from 2008-2011 (NSDUH)
- Female high school students were significantly more likely to report having made a suicide plan than male students in West Virginia in 2009 and 2011 (YRBS).
- West Virginia has had a higher age-adjusted death rate for suicide than the United States from 1999 to 2010 (VSS).
- Data from the West Virginia Coalition to End Homelessness, Point in Time Count and Housing Inventory indicates an increase in the reported chronic substance abuse between 2012 and 2013: 48.6% increase among the sheltered and 67.5% increase among the unsheltered homeless.
- In 2012, 3.5% survivors served by the West Virginia Coalition Against Domestic Violence (WVCADV) were identified as having a mental illness and 11.6% were referred to a mental health facility or provider.
- In 2012, substance abuse was identified as contributing to abuse in 45.7% of WVCADV cases and 0.7% were referred to a mental health facility or provider.

## Disclaimer

Every effort has been made to ensure the accuracy of the data and information presented in this profile, errors and conditions originating from physical sources used to develop the profile may be reflected in the data supplied. While the data being provided has been produced and processed from sources believed to be reliable, the Bureau for Behavioral Health and Health Facilities shall not be held liable for any errors in this data.

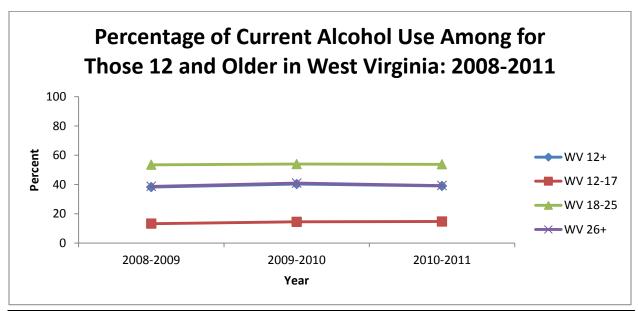
## **Alcohol Consumption**

## **Current Use of Alcohol**

<u>Indicator Description</u>: Current use is the consumption of at least one alcoholic beverage (beer, wine and liquor) within the last 30 days.

<u>Why this indicator is important</u>: Drinking alcohol can lead to long-term health risks such as chronic diseases, neurological impairments and social problems.

Those aged 18-25 reported the highest rate of current use of alcohol (use in the past month) from 2008-2011 compared to the other age groups. West Virginia had a lower rate of current alcohol use (39%, 2010-2011) than the national rate (51.8%, 2010-2011) (NSDUH).

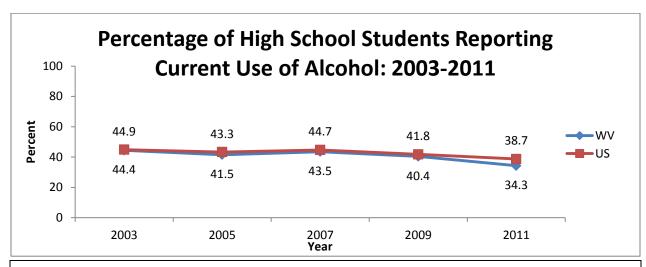


| Percentage of Current Alcohol Use Among Those 12 and Older |           |               |           |               |           |           |  |  |  |  |
|--|-----------|---------------|-----------|---------------|-----------|-----------|--|--|--|--|
|  |           | West Virginia |           | United States |           |           |  |  |  |  |
| Ages   | 2008-2009 | 2009-2010     | 2010-2011 | 2008-2009     | 2009-2010 | 2010-2011 |  |  |  |  |
| 12-17  | 13.2      | 14.5          | 14.7      | 14.8          | 14.2      | 13.5      |  |  |  |  |
| 18-25  | 53.5      | 53.9          | 53.8      | 61.5          | 61.6      | 61.0      |  |  |  |  |
| 26 and older   | 38.7      | 40.9          | 39.3      | 54.8          | 54.9      | 55.0      |  |  |  |  |
| 12 and older   | 38.2      | 40.3          | 39.0      | 51.7          | 51.8      | 51.8      |  |  |  |  |

Source: NSDUH

Note: Current use is defined as having at least one alcoholic drink in the past 30 days. 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

Between 2003 and 2011 West Virginia high school students reported lower rates of current alcohol use in the past 30 days than the national average. Twelfth grade students (46%) in West Virginia were significantly more likely to have consumed alcohol within the last 30 days than 9<sup>th</sup> and 10<sup>th</sup> grade students (29.6%, 28.1% YRBS).



# Percentage of High School Students Reporting Current Use of Alcohol by Gender and Grade: 2003-2011 West Virginia

|      | west viigilila |      |        |                 |                  |                  |                  |  |  |  |  |  |
|------|----------------|------|--------|-----------------|------------------|------------------|------------------|--|--|--|--|--|
|      | Total          | Ger  | nder   | Grade           |                  |                  |                  |  |  |  |  |  |
| Year | Total          | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |  |  |
| 2003 | 44.4           | 43.3 | 45.6   | 38.5            | 40.7             | 44.8             | 58.6             |  |  |  |  |  |
| 2005 | 41.5           | 45.3 | 37.5   | 37.2            | 39.9             | 49.7             | 41.3             |  |  |  |  |  |
| 2007 | 43.5           | 44.8 | 42.1   | 38.8            | 46.5             | 44.9             | 45.5             |  |  |  |  |  |
| 2009 | 40.4           | 40.5 | 40.2   | 30.5            | 36.6             | 47.5             | 49.5             |  |  |  |  |  |
| 2011 | 34.3           | 34.7 | 33.8   | 29.6            | 28.1             | 35.9             | 46.0             |  |  |  |  |  |

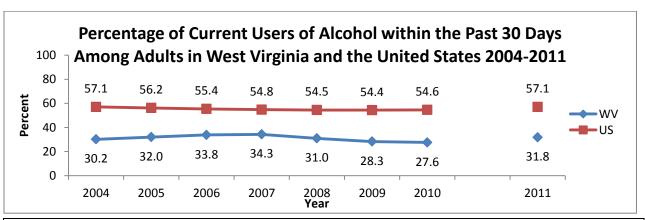
#### **United States**

|      | Total | Ger  | nder   | Grade           |                  |                  |                  |  |  |  |  |  |
|------|-------|------|--------|-----------------|------------------|------------------|------------------|--|--|--|--|--|
| Year | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |  |  |
| 2003 | 44.9  | 43.8 | 45.8   | 36.2            | 43.5             | 47.0             | 55.9             |  |  |  |  |  |
| 2005 | 43.3  | 43.8 | 42.8   | 36.2            | 42.0             | 46.0             | 50.8             |  |  |  |  |  |
| 2007 | 44.7  | 44.7 | 44.6   | 35.7            | 41.8             | 49.0             | 54.9             |  |  |  |  |  |
| 2009 | 41.8  | 40.8 | 42.9   | 31.5            | 40.6             | 45.7             | 51.7             |  |  |  |  |  |
| 2011 | 38.7  | 39.5 | 37.9   | 29.8            | 35.7             | 42.7             | 48.4             |  |  |  |  |  |

Source: YRBS

Notes: Current Use is defined as having at least one alcoholic drink in the past 30 days.

According to the Behavioral Risk Factor Surveillance System (BRFSS), West Virginia had a lower percentage of current use of alcohol among adults (in the past 30 days) than the US from 2004-2011. West Virginia was ranked as the second lowest for current alcohol use in the nation in 2011. Males had a higher prevalence of current use of alcohol than females. 18-24 year olds in West Virginia had a significantly higher percentage of current alcohol use than people 65 and over. College graduates in West Virginia had a significantly higher percentage of current alcohol use than those with less than a high school education. Also, those with an income of \$75,000 and higher in West Virginia had a significantly higher prevalence of current use of alcohol than those with an income less than \$15,000 (BRFSS).



### Percentage of Current Users of Alcohol within Past 30 Days Among Adults by Gender and Age: 2004-2011

|      | West Virginia |      |        |       |       |       |       |       |      |  |  |  |
|------|---------------|------|--------|-------|-------|-------|-------|-------|------|--|--|--|
|      | Total Gender  |      |        | Age   |       |       |       |       |      |  |  |  |
| Year | Total         | Male | Female | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+  |  |  |  |
| 2004 | 30.2          | 38.6 | 22.5   | 41.6  | 40.6  | 34.4  | 31.8  | 23.1  | 14.9 |  |  |  |
| 2005 | 32.0          | 40.4 | 24.2   | 42.4  | 41.9  | 36.1  | 32.5  | 27.4  | 16.9 |  |  |  |
| 2006 | 33.8          | 42.6 | 25.6   | 40.7  | 42.1  | 44.7  | 36.9  | 28.4  | 15.6 |  |  |  |
| 2007 | 34.3          | 43.9 | 25.4   | 42.4  | 49.3  | 39.6  | 35.7  | 29.0  | 16.7 |  |  |  |
| 2008 | 31.0          | 39.6 | 23.0   | 33.1  | 40.2  | 35.8  | 35.3  | 26.5  | 18.4 |  |  |  |
| 2009 | 28.3          | 35.6 | 21.4   | 34.2  | 36.0  | 34.5  | 32.1  | 25.3  | 13.0 |  |  |  |
| 2010 | 27.6          | 35.5 | 20.2   | 34.2  | 36.5  | 32.3  | 31.3  | 23.8  | 13.2 |  |  |  |
| 2011 | 31.8          | 41.0 | 23.3   | 41.6  | 43.1  | 36.1  | 35.6  | 26.0  | 16.3 |  |  |  |

#### **United States**

|      | Total | Ger  | ıder   | Age   |       |       |       |       |      |
|------|-------|------|--------|-------|-------|-------|-------|-------|------|
| Year | Total | Male | Female | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+  |
| 2004 | 57.1  | 64.7 | 50.1   | 59.8  | 63.4  | 61.1  | 58.7  | 53.5  | 40.2 |
| 2005 | 56.2  | 63.5 | 49.0   | 56.4  | 62.6  | 61.3  | 59.1  | 53.3  | 39.5 |
| 2006 | 55.4  | 62.1 | 49.0   | 53.7  | 61.7  | 61.2  | 58.7  | 53.0  | 39.8 |
| 2007 | 54.8  | 62.0 | 47.9   | 53.1  | 60.2  | 60.4  | 57.7  | 54.4  | 39.3 |
| 2008 | 54.5  | 61.3 | 47.7   | 49.9  | 60.5  | 60.5  | 58.5  | 53.5  | 40.7 |
| 2009 | 54.4  | 62.0 | 46.9   | 49.9  | 60.2  | 60.3  | 57.6  | 54.1  | 41.0 |
| 2010 | 54.6  | 61.7 | 47.6   | 48.3  | 61.0  | 60.2  | 57.7  | 53.6  | 40.5 |
| 2011 | 57.1  | 63.3 | 51.3   | 55.5  | 66.3  | 60.5  | 59.1  | 53.6  | 42.3 |

Sources: WV Health Statistics Center, Behavioral Risk Factor Surveillance System and CDC BRFSS website (WV data is estimated prevalence and the US data is median prevalence).

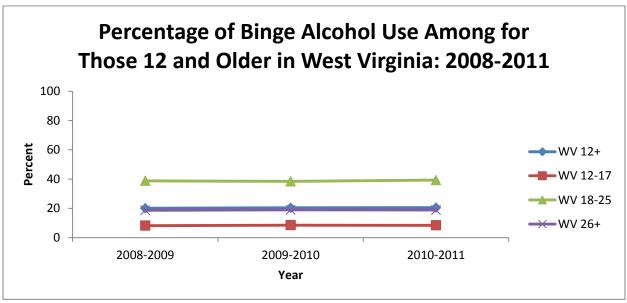
Note: Current use is defined as having had at least one alcoholic drink within the past 30 days. In 2011 there were changes made to the weighting methodology and the addition of the cell phone sampling frame, therefore 2011 prevalence data should not be directly compared to previous years of BRFSS data.

## **Binge Drinking**

<u>Indicator Description</u>: Binge drinking is defined as a pattern of drinking that brings a person's blood alcohol concentration (BAC) to 0.08 grams percent or higher. This usually occurs when men consume 5 or more drinks, and when women consume 4 or more drinks, within a period of 2 hours.

Why Indicator is Important: According to Alcohol-Related Disease Impact (ARDI), binge drinking causes more than half of the 80,000 alcohol related deaths and excessive drinking accounts for three quarters of the \$223.5 billion in alcohol related economic costs. Binge drinking is connected with many health problems such as injuries, alcohol poisoning, sexually transmitted diseases, chronic disease (such as cardiovascular disease and diabetes), children born with fetal alcohol spectrum disorders, neurological damage and more.

The highest reported binge drinking occurred among those aged 18-25. West Virginia had a slightly lower reported rate of binge drinking (20.5%, in 2010-2011) compared to the nation (22.9%, in 2010-2011), however those 12-17 reported a higher rate of binge drinking (8.4%) compared to the nation (7.6%) (NSDUH).

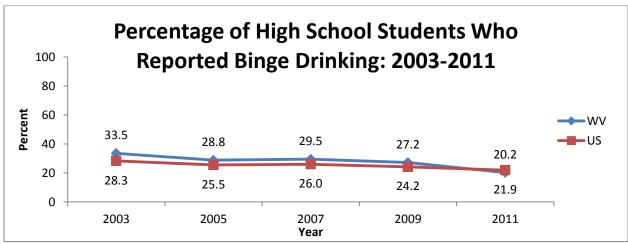


| Percentage of Binge Alcohol Use Among Those 12 and Older |           |               |           |               |           |           |  |  |  |  |
|--|-----------|---------------|-----------|---------------|-----------|-----------|--|--|--|--|
|  |           | West Virginia |           | United States |           |           |  |  |  |  |
| Ages   | 2008-2009 | 2009-2010     | 2010-2011 | 2008-2009     | 2009-2010 | 2010-2011 |  |  |  |  |
| 12-17  | 8.2       | 8.5           | 8.4       | 8.9           | 8.4       | 7.6       |  |  |  |  |
| 18-25  | 38.8      | 38.4          | 39.3      | 41.5          | 41.2      | 40.1      |  |  |  |  |
| 26 and older   | 18.6      | 19.0          | 18.8      | 22.3          | 22.2      | 21.8      |  |  |  |  |
| 12 and older   | 20.1      | 20.4          | 20.5      | 23.5          | 23.4      | 22.9      |  |  |  |  |

Source: NSDUH

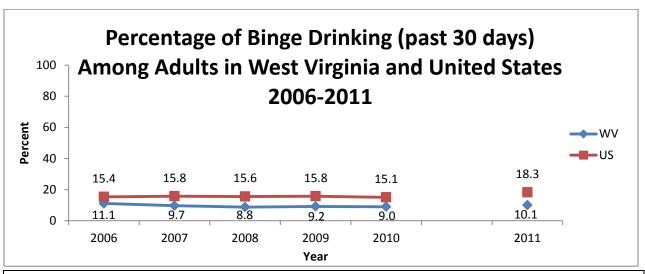
Note: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

Twelfth grade students in West Virginia were significantly more likely to binge drink (28.4%) than 9<sup>th</sup> and 10<sup>th</sup> grade students (17.1%, 15.5%). Male high school students have had a higher percentage of binge drinkers than females from 2003-2011 (YRBS).



|               |       |      | West V | 'irginia        |                  |                  |                  |  |  |  |
|---------------|-------|------|--------|-----------------|------------------|------------------|------------------|--|--|--|
|               | Total | Ge   | nder   |                 | Gra              | ade              |                  |  |  |  |
| Year          | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |
| 2003          | 33.5  | 34.2 | 32.7   | 25.8            | 29.0             | 35.4             | 48.4             |  |  |  |
| 2005          | 28.8  | 32.2 | 25.3   | 26.0            | 26.5             | 33.2             | 30.7             |  |  |  |
| 2007          | 29.5  | 32.2 | 26.6   | 23.9            | 31.0             | 32.0             | 32.8             |  |  |  |
| 2009          | 27.2  | 28.7 | 25.4   | 18.4            | 22.4             | 32.1             | 37.9             |  |  |  |
| 2011          | 20.2  | 21.9 | 18.5   | 17.1            | 15.5             | 21.4             | 28.4             |  |  |  |
| United States |       |      |        |                 |                  |                  |                  |  |  |  |
|               | Total | Ge   | nder   | der Grade       |                  |                  |                  |  |  |  |
| Year          | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |
| 2003          | 28.3  | 29.0 | 27.5   | 19.8            | 27.4             | 31.8             | 37.2             |  |  |  |
| 2005          | 25.5  | 27.5 | 23.5   | 19.0            | 24.6             | 27.6             | 32.8             |  |  |  |
| 2007          | 26.0  | 27.8 | 24.1   | 17.0            | 23.7             | 29.9             | 36.5             |  |  |  |
| 2009          | 24.2  | 25.0 | 23.4   | 15.3            | 22.3             | 28.3             | 33.5             |  |  |  |
| 2011          | 21.9  | 23.8 | 19.8   | 14.0            | 18.4             | 25.2             | 31.5             |  |  |  |

The US had a significantly higher percentage of binge drinking among adults than West Virginia in 2011. West Virginia was the second lowest state for binge drinking among adults in the US in 2011. Adult males in West Virginia had a significantly higher percentage of binge drinking than adult females. Eighteen to twenty-four year olds had a significantly higher percentage of binge drinking than adults 35 and older. Adults 65 and older had a significantly lower percentage of binge drinking than all other age groups. Binge drinking was also significantly higher among adults with a high school education or some college than adults with less than high school education (BRFSS).



## Percentage of Binge Drinking (past 30 days) among Adults by Gender and Age in West Virginia and United States 2006-2011

|      | West Virginia |      |        |       |       |       |       |       |     |  |  |
|------|---------------|------|--------|-------|-------|-------|-------|-------|-----|--|--|
|      | Total         | Ger  | nder   |       | Age   |       |       |       |     |  |  |
| Year | Total         | Male | Female | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ |  |  |
| 2006 | 11.1          | 16.0 | 6.7    | 24.1  | 16.3  | 14.7  | 10.7  | 4.7   | 2.0 |  |  |
| 2007 | 9.7           | 15.3 | 4.5    | 14.1  | 19.5  | 12.6  | 9.1   | 4.5   | 1.7 |  |  |
| 2008 | 8.8           | 14.0 | 3.9    | 13.8  | 17.4  | 10.4  | 9.1   | 4.0   | 1.3 |  |  |
| 2009 | 9.2           | 14.5 | 4.1    | 16.2  | 18.5  | 10.1  | 8.4   | 5.1   | 1.2 |  |  |
| 2010 | 9.0           | 13.6 | 4.7    | 18.2  | 14.2  | 12.2  | 8.1   | 5.0   | 1.6 |  |  |
| 2011 | 10.1          | 15.5 | 5.2    | 22.9  | 17.0  | 11.9  | 10.3  | 4.5   | 1.4 |  |  |

#### **United States**

|      | Total | Gender |        | Age   |       |       |       |       |     |
|------|-------|--------|--------|-------|-------|-------|-------|-------|-----|
| Year | iolai | Male   | Female | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ |
| 2006 | 15.4  | 20.4   | 10.1   | 25.9  | 23.6  | 17.8  | 13.0  | 8.6   | 3.0 |
| 2007 | 15.8  | 21.2   | 10.1   | 27.4  | 22.5  | 18.8  | 13.8  | 9.0   | 3.5 |
| 2008 | 15.6  | 21.0   | 10.0   | 24.7  | 23.8  | 18.1  | 14.2  | 8.6   | 3.2 |
| 2009 | 15.8  | 21.3   | 10.6   | 25.2  | 23.9  | 18.4  | 14.4  | 9.4   | 3.5 |
| 2010 | 15.1  | 20.2   | 10.4   | 22.1  | 22.6  | 19.1  | 14.9  | 9.5   | 3.4 |
| 2011 | 18.3  | 24.2   | 12.6   | 29.2  | 30.3  | 21.3  | 16.9  | 10.3  | 4.1 |

Sources: WV Health Statistics Center, Behavioral Risk Factor Surveillance System and CDC BRFSS website (WV data is estimated prevalence and the US data is median prevalence).

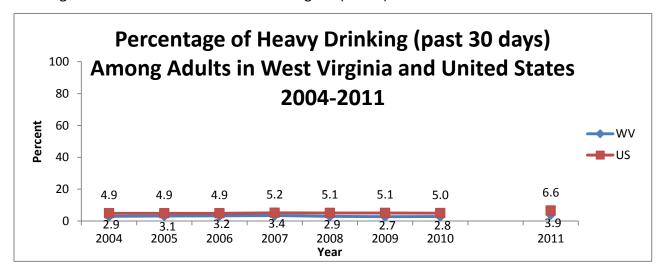
Note: Binge drinkers are defined as males having five or more drinks on one occasion and females having four or more drinks on one occasion within the last 30 days. In 2011 there were changes made to the weighting methodology and the addition of the cell phone sampling frame, therefore 2011 prevalence data should not be directly compared to previous years of BRFSS data.

## **Heavy Drinking**

<u>Indicator Description</u>: Heavy drinking is defined as having two or more alcoholic drinks daily for males and having one or more alcoholic drinks daily for females.

<u>Why Indicator is Important</u>: According to the CDC, heavy drinking increases the risks for health and safety. Some of the possible negative outcomes from heavy drinking include: unintentional injuries, violence, risky sexual behaviors, develop chronic diseases, neurological impairments and social problems.

West Virginia had a significantly lower percentage of heavy drinking compared to the United States in 2011. West Virginia had the second lowest percentage of heavy drinking in the nation in 2011. Males had a significantly higher percentage of heavy drinking than females in West Virginia. Eighteen to twenty-four year olds had a significantly higher percentage of heavy drinking than adults 65 and older in West Virginia (BRFSS).



## Percentage of Heavy Drinking (past 30 days) among Adults by Gender and Age in West Virginia and United States 2004-2011

|   |      |     |     | •   |
|---|------|-----|-----|-----|
| w | /est | VII | rgı | nıa |

|      | Total | Gender |        | Age   |       |       |       |       |      |  |
|------|-------|--------|--------|-------|-------|-------|-------|-------|------|--|
| Year | Total | Male   | Female | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+  |  |
| 2004 | 2.9   | 3.8    | 2.1    | 5.8*  | 2.1*  | 3.6   | 4.0   | 1.3*  | 1.0* |  |
| 2005 | 3.1   | 4.7    | 1.7    | 4.6*  | 4.3   | 4.0   | 2.6   | 2.9   | 1.3* |  |
| 2006 | 3.2   | 4.8    | 1.7    | 7.4*  | 3.5*  | 4.8   | 2.6   | 1.5*  | 0.9* |  |
| 2007 | 3.4   | 5.5    | 1.5    | 3.7*  | 5.9   | 4.8   | 3.0   | 2.6   | 1.1  |  |
| 2008 | 2.9   | 4.2    | 1.6    | 3.1*  | 3.6*  | 2.0*  | 4.3   | 3.4   | 1.0* |  |
| 2009 | 2.7   | 3.6    | 1.8    | 3.8*  | 3.5   | 2.3*  | 3.1   | 2.9   | 1.2  |  |
| 2010 | 2.8   | 3.7    | 2.0    | 2.8*  | 2.8*  | 4.1   | 3.7   | 2.8   | 1.2  |  |
| 2011 | 3.9   | 5.5    | 2.5    | 6.8*  | 5.4   | 3.9   | 5.5   | 2.2   | 1.4  |  |

#### **United States**

|      | Total | Gender |        | Age   |       |       |       |       |     |  |
|------|-------|--------|--------|-------|-------|-------|-------|-------|-----|--|
| Year | Total | Male   | Female | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ |  |
| 2004 | 4.9   | 5.8    | 4.2    | 8.7   | 4.8   | 4.6   | 4.5   | 4.0   | 2.9 |  |
| 2005 | 4.9   | 5.6    | 4.0    | 7.4   | 5.3   | 5.1   | 4.7   | 4.2   | 2.9 |  |
| 2006 | 4.9   | 5.6    | 4.4    | 7.4   | 5.3   | 4.9   | 4.7   | 4.2   | 2.6 |  |
| 2007 | 5.2   | 6.1    | 4.0    | 8.1   | 5.2   | 5.2   | 5.2   | 4.8   | 2.9 |  |
| 2008 | 5.1   | 5.6    | 4.4    | 7.3   | 5.5   | 5.2   | 5.7   | 4.6   | 3.0 |  |
| 2009 | 5.1   | 5.8    | 4.2    | 6.5   | 5.8   | 5     | 5.5   | 4.6   | 3.1 |  |
| 2010 | 5.0   | 5.4    | 4.5    | 5.2   | 4.9   | 4.9   | 5.6   | 4.9   | 3.0 |  |
| 2011 | 6.6   | 7.7    | 5.5    | 10.4  | 8.0   | 6.5   | 6.9   | 5.7   | 3.6 |  |

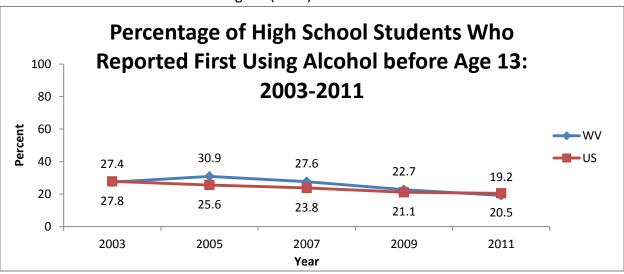
Sources: WV Health Statistics Center, Behavioral Risk Factor Surveillance System and CDC BRFSS website (WV data is estimated prevalence and the US data is median prevalence).

Note: Heavy Drinking is defined as adult men having more than two drinks per day and adult women having more than one drink per day within the past 30 days. In 2011 there were changes made to the weighting methodology and the addition of the cell phone sampling frame, therefore 2011 prevalence data should not be directly compared to previous years of BRFSS data. \*Estimates may be unreliable.

## Age of Initial Use

<u>Indicator Description</u>: Age of initial use is defined as the age of first use of alcohol. <u>Why Indicator is Important</u>: Current research suggests an association between the age of initial use of alcohol and problems with alcohol later in life. Postponing the initial use of alcohol is believed to help prevent alcohol dependency and abuse in adulthood. Substance abuse prevention planners can use age of initial use to help develop and initiate appropriate prevention programs. This indicator helps determine what age group may be more at risk for developing alcohol dependence or other substance abuse problems.

Male high school students in West Virginia reported a significantly higher percentage (22.8%) of first use of alcohol before the age of 13 than females (15.6%) in 2011. Male high school students had a higher percentage of age of initial use of alcohol before the age of 13 than females from 2003-2011 in West Virginia (YRBS).

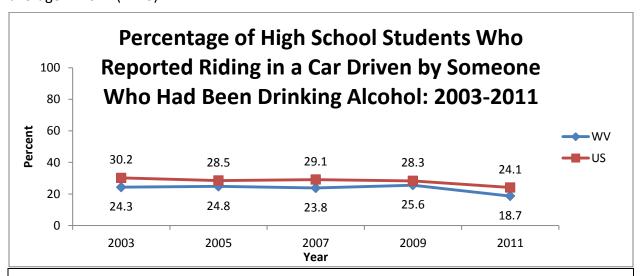


| rercentage | of High Scho | ooi Students | Who Reporte<br>Grade: 2 | d First Using<br>003-2011 | Alconol befo     | re Age 13 by     | Gender and       |  |  |
|------------|--------------|--------------|-------------------------|---------------------------|------------------|------------------|------------------|--|--|
|            |              |              | West \                  | /irginia                  |                  |                  |                  |  |  |
|            | Total        | Ge           | nder                    | Grade                     |                  |                  |                  |  |  |
| Year       |              | Male         | Female                  | 9 <sup>th</sup>           | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |
| 2003       | 27.4         | 28.8         | 25.9                    | 31.4                      | 28.6             | 23.7             | 24.5             |  |  |
| 2005       | 30.9         | 34.5         | 26.9                    | 37.1                      | 36.5             | 26.1             | 21.6             |  |  |
| 2007       | 27.6         | 31.9         | 23.0                    | 38.1                      | 24.7             | 22.9             | 21.6             |  |  |
| 2009       | 22.7         | 26.8         | 18.1                    | 30.5                      | 22.6             | 21.0             | 15.0             |  |  |
| 2011       | 19.2         | 22.8         | 15.6                    | 26.9                      | 20.2             | 15.7             | 12.5             |  |  |
|            |              |              | United                  | States                    |                  |                  |                  |  |  |
|            | Total        | Ge           | nder                    | Grade                     |                  |                  |                  |  |  |
| Year       | Total        | Male         | Female                  | 9 <sup>th</sup>           | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |
| 2003       | 27.8         | 32.0         | 23.3                    | 36.4                      | 28.5             | 23.0             | 20.3             |  |  |
| 2005       | 25.6         | 29.2         | 22.0                    | 33.9                      | 26.2             | 20.5             | 19.3             |  |  |
| 2007       | 23.8         | 27.4         | 20.0                    | 30.9                      | 24.4             | 19.6             | 18.0             |  |  |
| 2009       | 21.1         | 23.7         | 18.1                    | 28.1                      | 22.2             | 17.9             | 14.2             |  |  |
| 2011       | 20.5         | 23.3         | 17.4                    | 26.6                      | 21.1             | 17.6             | 15.1             |  |  |

# **Driving and Alcohol**

Indicator Description: Driving while intoxicated or drunk (with a BAC of 0.08 or higher). Why Indicator is Important: According to the National Highway Traffic Safety Administration (NHTSA), every day almost 30 people in the United States die in a motor vehicle crash that involves an alcohol impaired driver. It is estimated that the annual cost of alcohol related crashes in the US is more than \$51 billion. Since alcohol impairs a person's ability to drive, this indicator is a key measure for prevention providers so they can implement effective measures to reduce the number of deaths and injuries from impaired drivers.

West Virginia high school students were significantly less likely to ride in a car or other vehicle one or more times with someone who had been drinking alcohol compared to the national average in 2011 (YRBS).



Percentage of High School Students Who Reported Riding in a Car Driven by Someone Who Had Been Drinking Alcohol by Gender and Grade: 2003-2011

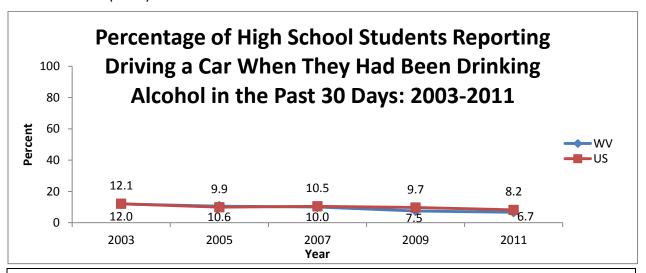
|      | West Virginia |      |        |                 |                  |                  |                  |  |  |  |  |
|------|---------------|------|--------|-----------------|------------------|------------------|------------------|--|--|--|--|
|      | Total         | Ger  | nder   |                 | Grade            |                  |                  |  |  |  |  |
| Year | Total         | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |  |
| 2003 | 24.3          | 24.7 | 23.9   | 21.1            | 21.2             | 28.1             | 27.2             |  |  |  |  |
| 2005 | 24.8          | 28.4 | 20.9   | 24.3            | 22.5             | 27.6             | 24.4             |  |  |  |  |
| 2007 | 23.8          | 25.3 | 22.0   | 22.3            | 25.6             | 20.0             | 27.6             |  |  |  |  |
| 2009 | 25.6          | 24.7 | 25.9   | 22.6            | 23.9             | 28.1             | 29.0             |  |  |  |  |
| 2011 | 18.7          | 19.9 | 17.5   | 19.5            | 15.8             | 18.5             | 21.2             |  |  |  |  |
|      |               |      | United | States          |                  |                  |                  |  |  |  |  |

|      | United States |      |        |                 |                  |                  |                  |  |  |  |  |
|------|---------------|------|--------|-----------------|------------------|------------------|------------------|--|--|--|--|
|      | Total         | Ger  | nder   | Grade           |                  |                  |                  |  |  |  |  |
| Year | Total         | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |  |
| 2003 | 30.2          | 29.2 | 31.1   | 28.2            | 29.3             | 30.5             | 33.3             |  |  |  |  |
| 2005 | 28.5          | 27.2 | 29.6   | 27.9            | 27.8             | 28.0             | 30.1             |  |  |  |  |
| 2007 | 29.1          | 29.5 | 28.8   | 27.6            | 28.7             | 29.2             | 31.5             |  |  |  |  |
| 2009 | 28.3          | 27.8 | 28.8   | 27.5            | 28.0             | 29.4             | 28.2             |  |  |  |  |
| 2011 | 24.1          | 23.3 | 24.9   | 21.8            | 23.3             | 23.8             | 27.7             |  |  |  |  |

Source: YRBS

Notes: Students in 9-12 grades reporting riding in a car within the past 30 days with a driver who had been drinking alcohol.

In 2011, 12<sup>th</sup> grade students had a significantly higher percentage of driving a car after drinking alcohol (12.6%) than 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> grade students (4.7%, 4.2%, 6.1%). Male high school students in West Virginia had a significantly higher percentage of driving after drinking alcohol (9.1%) than female students (4.1%) in 2011. West Virginia high school students had a significantly lower rate of driving after drinking alcohol compared to the national average in 2009 and 2011 (YRBS).



Percentage of High School Students Reporting Driving a Car When They Had Been Drinking Alcohol by Gender and Grade: 2003-2011

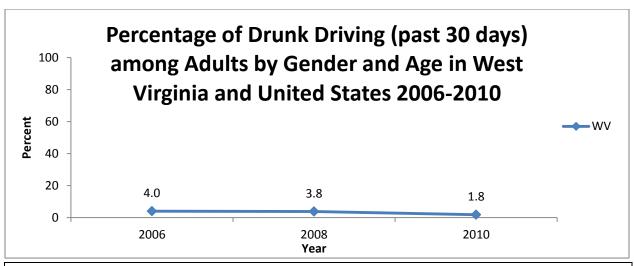
|      | West Virginia |      |        |                 |                  |                  |                  |  |  |  |  |
|------|---------------|------|--------|-----------------|------------------|------------------|------------------|--|--|--|--|
|      | Total         | Ger  | nder   | Grade           |                  |                  |                  |  |  |  |  |
| Year | Total         | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |  |
| 2003 | 12.0          | 14.5 | 9.3    | 6.9             | 10.3             | 13.9             | 18.5             |  |  |  |  |
| 2005 | 10.6          | 15.2 | 5.8    | 7.5             | 10.2             | 11.9             | 13.5             |  |  |  |  |
| 2007 | 10.0          | 12.8 | 6.8    | 6.1             | 11.0             | 9.5              | 14.5             |  |  |  |  |
| 2009 | 7.5           | 8.8  | 5.9    | 3.3             | 6.3              | 9.3              | 12.5             |  |  |  |  |
| 2011 | 6.7           | 9.1  | 4.1    | 4.7             | 4.2              | 6.1              | 12.6             |  |  |  |  |

#### **United States** Gender Grade **Total** 9<sup>th</sup> 10<sup>th</sup> 12<sup>th</sup> 11<sup>th</sup> Year Male **Female** 15.3 2003 12.1 15.0 8.9 6.2 9.2 19.8 2005 9.9 11.7 8.1 5.5 6.6 12.1 17.1 2007 10.5 12.8 8.1 5.5 8.7 11.5 18.3 2009 9.7 11.6 7.6 5.0 8.3 11.4 15.4 2011 8.2 9.5 6.7 4.7 5.6 9.1 13.6

Source: YRBS

Notes: Students in 9-12 grades reporting driving a car one or more times in the past 30 Days when they had been drinking alcohol.

Reported drunk driving (the past 30 days) among adults in West Virginia was 1.8% in 2010. Drunk driving among adults in West Virginia decreased slightly since 2006. Adult males had a higher rate of drunk driving compared to females from 2006-2010. Drunk driving was highest among adults 18-24 in West Virginia in 2006 and 2008 (BRFSS).



Percentage of Drunk Driving (past 30 days) among Adults by Gender and Age in West Virginia 2006-2010

|      | West Virginia    |      |        |       |       |       |       |       |     |  |  |
|------|------------------|------|--------|-------|-------|-------|-------|-------|-----|--|--|
|      | Total Gender Age |      |        |       |       |       |       |       |     |  |  |
| Year | TOLAI            | Male | Female | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ |  |  |
| 2006 | 4.0              | 4.6  | 3.0    | 11.3  | 2.5   | 4.9   | 2.6   | 0.7   | 1.2 |  |  |
| 2008 | 3.8              | 5.0  | 1.9    | 12.0  | 2.6   | 2.0   | 5.0   | 1.0   | 1.7 |  |  |
| 2010 | 1 2              | 2.1  | 1.5    | NΛ    | 2.4   | 2.1   | 2.8   | 1 2   | 0.6 |  |  |

Source: WV Health Statistics Center, Behavioral Risk Factor Surveillance System (WV data is estimated prevalence).

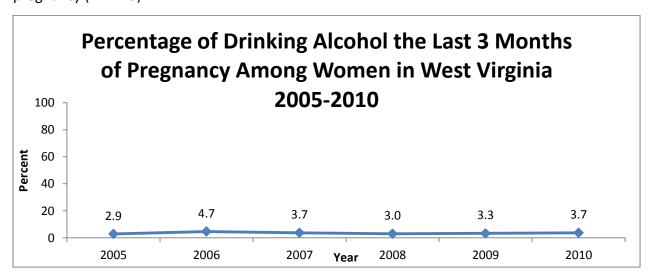
Notes: 2006 excludes people who did not drink in past month; 2008 and 2010 excludes people who did not drink in past month and people who did not drive or ride in a car in past month. A US comparison is not available for drunk driving (BRFSS).

# **Alcohol Use During Pregnancy**

**Indicator Description**: The consumption of alcohol during pregnancy.

Why Indicator is Important: According to the CDC, there is no known safe amount of alcohol to drink while pregnant. Drinking alcohol during pregnancy can lead to miscarriage, stillbirth, and fetal alcohol spectrum disorders (FASDs). Consuming alcohol in the first three months of pregnancy can cause the baby to have abnormal facial features. Problems with growth and central nervous system can occur from drinking alcohol during any point in the pregnancy. Brain development of the baby occurs throughout the pregnancy and can be damaged at any time from alcohol consumption by the mother. This indicator is important for prevention providers to deliver targeted education outreach and intervention to women during preconception and while they are pregnant in order to improve the health outcome of infants.

In 2010, 3.7% of women reported drinking alcohol the last three months of pregnancy. Pregnant women aged 35 and over had the highest percentage of drinking alcohol the last 3 months of pregnancy in West Virginia. In 2010, women with the lowest and highest income (<\$10,000 and  $\geq$ \$50,000) reported the highest use of alcohol in the last three months of pregnancy (PRAMS).



| Percentage of Drinking Last 3 Months of Pregnancy Among Women by Age, Income in West Virginia 2005-2010 |      |      |      |      |      |      |  |  |  |  |
|---|------|------|------|------|------|------|--|--|--|--|
|   | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |  |  |  |  |
| Total   | 2.9  | 4.7  | 3.7  | 3.0  | 3.3  | 3.7  |  |  |  |  |
| Age   |      |      |      |      |      |      |  |  |  |  |
| < 20 years  | 2.6  | 2.5  | 1.4  | 0.8  | 1.4  | 2.5  |  |  |  |  |
| 20-24 years   | 2.5  | 5.8  | 3.9  | 2.6  | 2.7  | 3.4  |  |  |  |  |
| 25-34 years   | 2.5  | 3.5  | 3.7  | 3.4  | 4.1  | 3.3  |  |  |  |  |
| 35+ years   | 7.0  | 10.2 | 6.5  | 5.0  | 5.7  | 8.9  |  |  |  |  |
| Income  |      |      |      |      |      |      |  |  |  |  |
| <\$10,000   | 3.1  | 4.4  | 2.8  | 2.7  | 2.5  | 5.1  |  |  |  |  |
| \$10,000-\$14,999   | 1.5  | 3.1  | 2.2  | 2.6  | 1.0  | 1.8  |  |  |  |  |
| \$15,000-\$19,999   | 3.8  | 13.9 | 4.2  | 7.3  | 1.8  | 0.4  |  |  |  |  |
| \$20,000-\$24,999   | 0.2  | 2.5  | 0.6  | 0.2  | 3.6  | 2.2  |  |  |  |  |
| \$25,000-\$34,999   | 7.0  | 8.5  | 8.4  | 1.2  | 1.7  | 2.6  |  |  |  |  |
| \$35,000-\$49,000   | 1.6  | 1.8  | 2.9  | 3.4  | 3.2  | 4.1  |  |  |  |  |
| <u>&gt;</u> \$50,000  | 2.5  | 3.5  | 5.3  | 3.4  | 6.4  | 5.1  |  |  |  |  |
| Source: PRAMS   |      |      |      |      |      |      |  |  |  |  |

Pregnant women receiving Medicaid for prenatal care and/or delivery had a lower rate of drinking alcohol during the last three months of pregnancy than pregnant women who didn't receive Medicaid for prenatal care and/or delivery from 2007-2010. Also, pregnant women receiving Medicaid for prenatal care and/or delivery had a lower rate of drinking alcohol three months before pregnancy than pregnant women who didn't receive Medicaid for prenatal care and/or delivery from 2009-2010 (PRAMS).

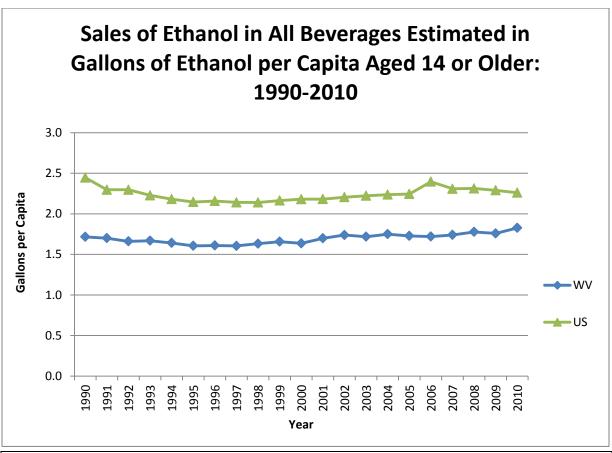
| Percentage of Drinking Last 3 Months of Pregnancy Among Women by Medicaid for<br>Prenatal Care and/or Delivery Payment in West Virginia 2005-2010 |                                      |                    |             |              |            |          |  |  |  |  |  |
|---|--------------------------------------|--------------------|-------------|--------------|------------|----------|--|--|--|--|--|
| 2005 2006 2007 2008 2009 2010   |                                      |                    |             |              |            |          |  |  |  |  |  |
| Medicaid  | 2.8                                  | 5.2                | 2.9         | 2.7          | 2.4        | 3.4      |  |  |  |  |  |
| Non-Medicaid 3.2 3.9 4.9 3.4 4.8 4.3  |                                      |                    |             |              |            |          |  |  |  |  |  |
| Percentage of Drir  | nking 3 Mon                          | ths Before F       | Pregnancy A | mong Wom     | en by Medi | caid for |  |  |  |  |  |
| Prenatal (  | Care and/or                          | <b>Delivery Pa</b> | yment in W  | est Virginia | 2005-2010  |          |  |  |  |  |  |
|   | 2005                                 | 2006               | 2007        | 2008         | 2009       | 2010     |  |  |  |  |  |
| Medicaid  | Medicaid 41.9 42.1 42.4 45 35.9 43.1 |                    |             |              |            |          |  |  |  |  |  |
| Non-Medicaid 47.3 44.9 50.7 38.6 45.7 46.7  |                                      |                    |             |              |            |          |  |  |  |  |  |
| Source: PRAMS   |                                      |                    |             |              |            |          |  |  |  |  |  |

# **Apparent Per Capita Ethanol Consumption**

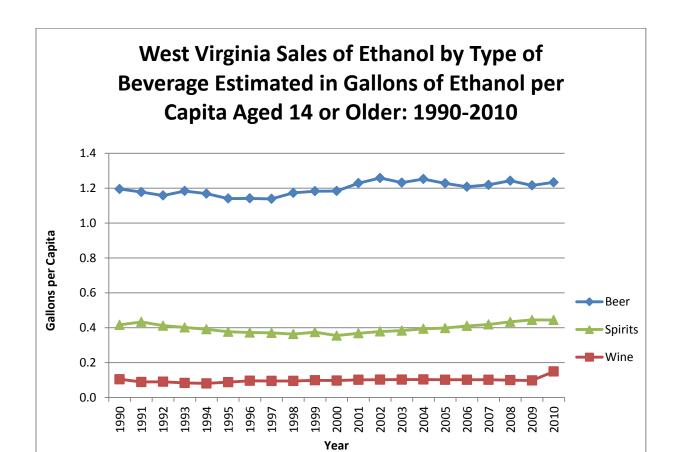
<u>Indicator Description</u>: This indicator summarizes the average per capita ethanol consumption by West Virginians and nationally. The type of alcohol consumption is also available: beer, wine, and spirits (liquor).

<u>Why Indicator is Important</u>: This indicator is valuable because it depicts the actual consumption of alcohol which can be compared nationally or to other states.

West Virginia sales of ethanol in all beverages estimated in gallons has been lower than the US from 1990-2010. West Virginia had a higher per capita of sales of beer for people 14 and older from 2002 to 2010, however a lower rate for wine and spirits (AEDS).



| Sales of Ethan        | Sales of Ethanol in All Beverages Estimated in Gallons of Ethanol per 10,000 Population  |      |      |      |      |      |      |      |      |      |     |
|-----------------------|--|------|------|------|------|------|------|------|------|------|-----|
|                       | Aged 14 or Older: 1990-2009  |      |      |      |      |      |      |      |      |      |     |
| Year                  | Year 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000  |      |      |      |      |      |      |      |      |      |     |
| West Virginia         | 1.7  | 1.7  | 1.7  | 1.7  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.7  | 1.6 |
| <b>United States</b>  | 2.4  | 2.3  | 2.3  | 2.2  | 2.2  | 2.1  | 2.2  | 2.1  | 2.1  | 2.2  | 2.2 |
| Year                  | 2001   | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |     |
| West Virginia         | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.8  | 1.8  | 1.8  |     |
| <b>United States</b>  | United States         2.2         2.2         2.2         2.2         2.4         2.3         2.3         2.3         2.3      |      |      |      |      |      |      |      |      |      |     |
| Source: Alcohol Epide | Source: Alcohol Epidemiologic Data System (AEDS), sponsored by the National Institute on Alcohol Abuse and Alcoholism (NIAAA). |      |      |      |      |      |      |      |      |      |     |



| Sales of Ethano       | Sales of Ethanol by Type of Beverage Estimated in Gallons of Ethanol per Capita Aged 14 or Older: 1990-2009 |            |            |            |            |               |           |             |              |            |      |  |
|-----------------------|---|------------|------------|------------|------------|---------------|-----------|-------------|--------------|------------|------|--|
| West Virginia         | 1990  | 1991       | 1992       | 1993       | 1994       | 1995          | 1996      | 1997        | 1998         | 1999       | 2000 |  |
| Beer                  | 1.20  | 1.18       | 1.16       | 1.18       | 1.17       | 1.14          | 1.14      | 1.14        | 1.17         | 1.18       | 1.18 |  |
| Spirits               | 0.42  | 0.43       | 0.41       | 0.40       | 0.39       | 0.38          | 0.37      | 0.37        | 0.36         | 0.37       | 0.35 |  |
| Wine                  | 0.10  | 0.09       | 0.09       | 0.08       | 0.08       | 0.09          | 0.10      | 0.10        | 0.10         | 0.10       | 0.10 |  |
| <b>United States</b>  | 1990  | 1991       | 1992       | 1993       | 1994       | 1995          | 1996      | 1997        | 1998         | 1999       | 2000 |  |
| Beer                  | 1.34  | 1.29       | 1.29       | 1.26       | 1.25       | 1.23          | 1.23      | 1.22        | 1.22         | 1.23       | 1.22 |  |
| Spirits               | 0.77  | 0.71       | 0.71       | 0.68       | 0.65       | 0.63          | 0.63      | 0.62        | 0.62         | 0.63       | 0.65 |  |
| Wine                  | 0.33  | 0.30       | 0.30       | 0.28       | 0.28       | 0.29          | 0.30      | 0.30        | 0.30         | 0.31       | 0.31 |  |
| West Virginia         | 2001  | 2002       | 2003       | 2004       | 2005       | 2006          | 2007      | 2008        | 2009         | 2010       |      |  |
| Beer                  | 1.23  | 1.26       | 1.23       | 1.25       | 1.23       | 1.21          | 1.22      | 1.24        | 1.22         | 1.23       |      |  |
| Spirits               | 0.37  | 0.38       | 0.38       | 0.39       | 0.40       | 0.41          | 0.42      | 0.43        | 0.44         | 0.44       |      |  |
| Wine                  | 0.10  | 0.10       | 0.10       | 0.10       | 0.10       | 0.10          | 0.10      | 0.10        | 0.10         | 0.15       |      |  |
| <b>United States</b>  | 2001  | 2002       | 2003       | 2004       | 2005       | 2006          | 2007      | 2008        | 2009         | 2010       |      |  |
| Beer                  | 1.23  | 1.23       | 1.21       | 1.21       | 1.19       | 1.15          | 1.20      | 1.20        | 1.17         | 1.13       |      |  |
| Spirits               | 0.64  | 0.65       | 0.67       | 0.68       | 0.70       | 0.76          | 0.73      | 0.73        | 0.74         | 0.74       |      |  |
| Wine                  | Wine 0.31 0.33 0.34 0.35 0.36 0.50 0.38 0.38 0.38 0.39  |            |            |            |            |               |           |             |              |            |      |  |
| Source: Alcohol Epide | miologic Da   | ata System | (AEDS), sp | onsored by | the Nation | nal Institute | on Alcoho | l Abuse and | d Alcoholisi | m (NIAAA). |      |  |

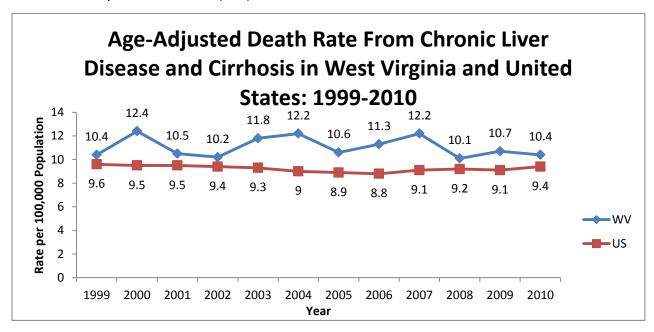
# **Alcohol Consequences**

### **Alcohol-Attributable Deaths**

<u>Indicator Description</u>: According to the CDC there are multiple adverse health consequences, including cirrhosis of the liver, various cancers, unintentional injuries, and violence that are associated with alcohol-attributable deaths. This indicator includes death rates for alcohol related conditions such as chronic liver disease and cirrhosis, alcohol-induced causes, and average alcohol-attributable deaths from chronic and acute causes.

<u>Why Indicator is Important</u>: The CDC reports that excessive alcohol consumption is the third leading preventable causes of death in the United States. This indicator is important because it highlights some of the consequences to abusing alcohol and puts a value on the consequences of alcohol abuse. Alcohol abuse can have negative impacts that affect the quality and length of one's life. It is important to track these consequences to measure the impact that alcohol abuse has on a state and to evaluate if prevention measures are effective at reducing the negative impacts.

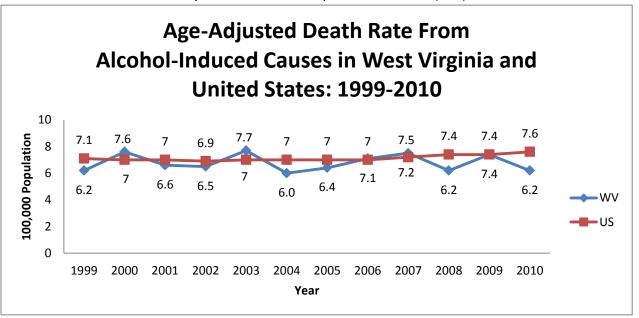
West Virginia has had a higher age-adjusted death rate for chronic liver disease and cirrhosis than the United States from 1999 to 2010. Males had a significantly higher age-adjusted death rate from chronic liver disease and cirrhosis than females in West Virginia for each year and for the combined years 1999-2010 (VSS).



| Age-Adjusted | Age-Adjusted Death Rate per 100,000 Population From Chronic Liver Disease and Cirrhosis by Gender |               |       |        |                      |       |  |  |  |  |
|--------------|---|---------------|-------|--------|----------------------|-------|--|--|--|--|
| Voor         |   | West Virginia |       |        | <b>United States</b> |       |  |  |  |  |
| Year         | Female  | Male          | Total | Female | Male                 | Total |  |  |  |  |
| 1999         | 6.0   | 15.1          | 10.4  | 6.1    | 13.5                 | 9.6   |  |  |  |  |
| 2000         | 7.5   | 18.0          | 12.4  | 6.2    | 13.4                 | 9.5   |  |  |  |  |
| 2001         | 7.3   | 14.0          | 10.5  | 6.3    | 13.2                 | 9.5   |  |  |  |  |
| 2002         | 6.3   | 14.4          | 10.2  | 6.3    | 12.9                 | 9.4   |  |  |  |  |
| 2003         | 6.6   | 17.5          | 11.8  | 6      | 13                   | 9.3   |  |  |  |  |
| 2004         | 6.7   | 17.8          | 12.2  | 5.9    | 12.4                 | 9     |  |  |  |  |
| 2005         | 6.2   | 15.3          | 10.6  | 5.8    | 12.4                 | 8.9   |  |  |  |  |
| 2006         | 8.3   | 14.3          | 11.3  | 5.8    | 12.1                 | 8.8   |  |  |  |  |
| 2007         | 7.4   | 17.0          | 12.2  | 5.9    | 12.7                 | 9.1   |  |  |  |  |
| 2008         | 5.6   | 14.9          | 10.1  | 6      | 12.7                 | 9.2   |  |  |  |  |
| 2009         | 6.9   | 14.9          | 10.7  | 6.1    | 12.5                 | 9.1   |  |  |  |  |
| 2010         | 6.4   | 14.6          | 10.4  | 6.2    | 12.9                 | 9.4   |  |  |  |  |
| 1999-2010    | 6.7   | 15.4          | 11.1  | 6      | 12.8                 | 9.3   |  |  |  |  |

Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Apr 24, 2013. ICD-10 codes: K70, K73-K74

Males in West Virginia had a significantly higher age-adjusted death rate from alcohol induced causes than females for each year and combined years 1999-2010 (VSS).



| Age-Adj   | Age-Adjusted Death Rate per 100,000 Population From Alcohol-Induced Causes by Gender |               |       |        |               |       |  |  |  |  |
|-----------|--|---------------|-------|--------|---------------|-------|--|--|--|--|
| Voor      |  | West Virginia |       |        | United States |       |  |  |  |  |
| Year      | Female   | Male          | Total | Female | Male          | Total |  |  |  |  |
| 1999      | 1.8  | 10.9          | 6.2   | 3.2    | 11.5          | 7.1   |  |  |  |  |
| 2000      | 2.5  | 13.1          | 7.6   | 3.2    | 11.4          | 7     |  |  |  |  |
| 2001      | 2.3  | 11.4          | 6.6   | 3.3    | 11.2          | 7     |  |  |  |  |
| 2002      | 1.9  | 11.4          | 6.5   | 3.3    | 11            | 6.9   |  |  |  |  |
| 2003      | 2.2  | 13.6          | 7.7   | 3.3    | 11            | 7     |  |  |  |  |
| 2004      | 1.4  | 11.0          | 6.0   | 3.3    | 11            | 7     |  |  |  |  |
| 2005      | 1.9  | 11.1          | 6.4   | 3.4    | 11            | 7     |  |  |  |  |
| 2006      | 3.2  | 11.4          | 7.1   | 3.4    | 10.9          | 7     |  |  |  |  |
| 2007      | 2.6  | 12.7          | 7.5   | 3.5    | 11.3          | 7.2   |  |  |  |  |
| 2008      | 1.5  | 11.1          | 6.2   | 3.6    | 11.5          | 7.4   |  |  |  |  |
| 2009      | 3.6  | 11.3          | 7.4   | 3.8    | 11.3          | 7.4   |  |  |  |  |
| 2010      | 2.6  | 10.0          | 6.2   | 3.9    | 11.7          | 7.6   |  |  |  |  |
| 1999-2010 | 2.3  | 11.6          | 6.8   | 3.4    | 11.2          | 7.2   |  |  |  |  |

Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2010 on CDC WONDER Online Database, released 2012. Data are from the Multiple Cause of Death Files, 1999-2010, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html on May 11, 2013 5:31:24 PM ICD-10 codes: F10.0-F10.9, G31.2, G62.1, G72.1, I42.6, K29.2, K70.0-K70.4, K70.9, K85.2, K86.0, R78.0, X45, X65, Y15

The Alcohol-Related Disease Impact (ARDI) application generates estimates of alcohol-attributable deaths (AAD) and years of potential life lost (YPLL) due to alcohol consumption. The health consequences of excessive alcohol use are estimated to help provide an improved understanding of this issue nationally and in states. The two highest average chronic causes for alcohol-attributable deaths due to excessive alcohol use for all ages in West Virginia are alcoholic liver disease (80) and liver cirrhosis unspecified (64), males account for the majority of those deaths. The two highest average acute causes for alcohol-attributable deaths due to excessive alcohol use for all ages in West Virginia are motor-vehicle traffic crashes (119) and suicide (62) again with men accounting for the majority of deaths (ARDI).

| Average Alcohol-Attributable Deaths Due to Excessive Alcohol Use for All Ages, 2001-2005 |         |                             |         |         |        |         |  |  |  |
|--|---------|-----------------------------|---------|---------|--------|---------|--|--|--|
| Harmful Effects  | W       | West Virginia United States |         |         |        |         |  |  |  |
| Chronic Causes   | Overall | Males                       | Females | Overall | Males  | Females |  |  |  |
| Acute pancreatitis   | 6       | 4                           | 2       | 695     | 366    | 329     |  |  |  |
| Alcohol abuse  | 21      | 18                          | 3       | 2,382   | 1,868  | 514     |  |  |  |
| Alcohol cardiomyopathy   | 2       | 2                           | 0       | 448     | 389    | 59      |  |  |  |
| Alcohol dependence syndrome  | 14      | 13                          | 1       | 3,857   | 3,037  | 820     |  |  |  |
| Alcohol-induced chronic pancreatitis   | 1       | 1                           | 0       | 311     | 248    | 63      |  |  |  |
| Alcoholic gastritis  | 0       | 0                           | 0       | 21      | 17     | 4       |  |  |  |
| Alcoholic liver disease  | 80      | 67                          | 13      | 12,219  | 8,938  | 3,281   |  |  |  |
| Alcoholic psychosis  | 2       | 2                           | 0       | 751     | 568    | 183     |  |  |  |
| Breast cancer (females only)   | 2       | 0                           | 2       | 417     | 0      | 417     |  |  |  |
| Chronic hepatitis  | < 1     | 0                           | < 1     | 4       | 2      | 2       |  |  |  |
| Chronic pancreatitis   | 0       | 0                           | 0       | 229     | 118    | 112     |  |  |  |
| Degeneration of nervous system due to alcohol  | 0       | 0                           | 0       | 91      | 77     | 14      |  |  |  |
| Epilepsy   | < 1     | < 1                         | < 1     | 191     | 102    | 88      |  |  |  |
| Esophageal cancer  | 3       | 3                           | < 1     | 525     | 466    | 59      |  |  |  |
| Esophageal varices   | 0       | 0                           | 0       | 74      | 53     | 20      |  |  |  |
| Gastroesophageal hemorrhage  | 0       | 0                           | 0       | 29      | 16     | 13      |  |  |  |
| Hypertension   | 7       | 4                           | 3       | 1,544   | 836    | 708     |  |  |  |
| Ischemic heart disease   | 6       | 5                           | 1       | 983     | 682    | 300     |  |  |  |
| Laryngeal cancer   | 2       | 2                           | < 1     | 267     | 231    | 35      |  |  |  |
| Liver cancer   | 4       | 3                           | 1       | 893     | 671    | 222     |  |  |  |
| Liver cirrhosis unspecified  | 64      | 35                          | 29      | 7,055   | 4,134  | 2,921   |  |  |  |
| Low birth weight prematurity IUGR death*   | 1       | < 1                         | < 1     | 184     | 122    | 62      |  |  |  |
| Oropharyngeal cancer   | 2       | 2                           | < 1     | 406     | 345    | 61      |  |  |  |
| Portal hypertension  | 0       | 0                           | 0       | 40      | 26     | 14      |  |  |  |
| Prostate cancer (males only)   | 1       | 1                           | 0       | 241     | 241    | 0       |  |  |  |
| Stroke hemorrhagic   | 10      | 9                           | 2       | 1,847   | 1,520  | 327     |  |  |  |
| Stroke ischemic  | 4       | 3                           | 1       | 715     | 519    | 196     |  |  |  |
| Superventricular cardiac dysrthymia  | 1       | 1                           | 1       | 219     | 96     | 123     |  |  |  |
| Subtotal   | 235     | 175                         | 60      | 36,643  | 25,693 | 10,950  |  |  |  |

| Harmful Effects                               | W       | est Virgi | nia     | U       | nited Sta | tes     |
|---|---------|-----------|---------|---------|-----------|---------|
| Acute Causes                                  | Overall | Males     | Females | Overall | Males     | Females |
| Air-space transport                           | < 1     | < 1       | 0       | 125     | 104       | 21      |
| Alcohol poisoning                             | 0       | 0         | 0       | 370     | 292       | 78      |
| Aspiration                                    | 1       | < 1       | 1       | 204     | 109       | 95      |
| Child maltreatment                            | 1       | < 1       | < 1     | 168     | 96        | 72      |
| Drowning                                      | 5       | 5         | 0       | 868     | 716       | 152     |
| Fall injuries                                 | 41      | 21        | 20      | 5,532   | 2,888     | 2,644   |
| Fire injuries                                 | 10      | 7         | 3       | 1,158   | 692       | 466     |
| Firearm injuries                              | 2       | 2         | 0       | 123     | 108       | 15      |
| Homicide                                      | 38      | 25        | 12      | 7,787   | 6,174     | 1,613   |
| Hypothermia                                   | 1       | 1         | < 1     | 269     | 182       | 87      |
| Motor-vehicle nontraffic crashes              | 4       | 3         | 1       | 183     | 147       | 36      |
| Motor-vehicle traffic crashes                 | 119     | 91        | 28      | 13,819  | 10,802    | 3,016   |
| Occupational and machine injuries             | 2       | 2         | 0       | 138     | 130       | 7       |
| Other road vehicle crashes                    | 1       | 1         | < 1     | 210     | 165       | 45      |
| Poisoning (not alcohol)                       | 56      | 39        | 17      | 5,416   | 3,669     | 1,747   |
| Suicide                                       | 62      | 52        | 9       | 7,235   | 5,778     | 1,457   |
| Suicide by and exposure to alcohol            | 0       | 0         | 0       | 31      | 22        | 9       |
| Water transport                               | < 1     | < 1       | 0       | 98      | 87        | 11      |
| Subtotal                                      | 342     | 251       | 91      | 43,731  | 32,159    | 11,572  |
| Total for All Causes (Chronic & Acute Causes) | 576     | 425       | 151     | 80,374  | 57,852    | 22,522  |

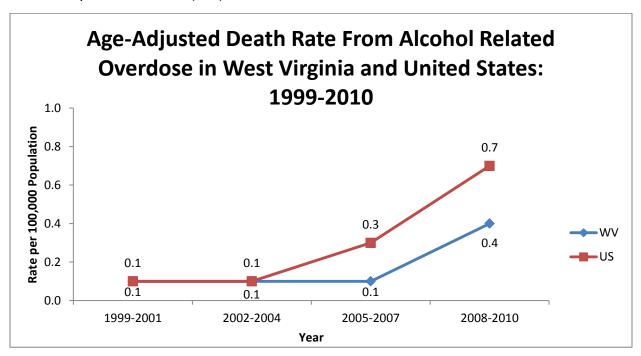
Source: Alcohol-Related Disease Impact (ARDI) software, Centers for Disease Control and Prevention http://apps.nccd.cdc.gov/DACH\_ARDI/Default/Default.aspx
Note: Subtotal and total numbers may not sum to total due to rounding.

### **Alcohol Overdoses**

<u>Indicator Description</u>: This indicator examines alcohol overdoses caused by drinking too much alcohol.

Why Indicator is Important: Drinking too much alcohol can lead to an overdose. This can occur when the person has a blood alcohol content (or BAC) sufficient to produce impairments that increase the risk of harm. According the National Institute of Alcohol Abuse and Alcoholism, the severity of overdoses can range from problems with balance and slurred speech to coma or even death. Alcohol poisoning takes place when there is so much alcohol in the bloodstream that areas of the brain controlling basic life support functions (breathing, heart rate, and temperature control) begin to stop functioning. Alcohol poisoning symptoms include: confusion, difficulty remaining conscious, vomiting, seizures, trouble with breathing, slow heart rate, clammy skin, dulled responses, such as no gag reflex (which prevents choking), and extremely low body temperature. This indicator is important because it tracks the consequences of alcohol abuse in the state and can assist prevention efforts.

The age-adjusted death rate for alcohol induced overdose for West Virginia significantly increased in 2008-2010 for the total population, males and females. Males have had a significantly higher rate of death from alcohol related deaths than females for each year and combined years 1999-2010 (VSS).



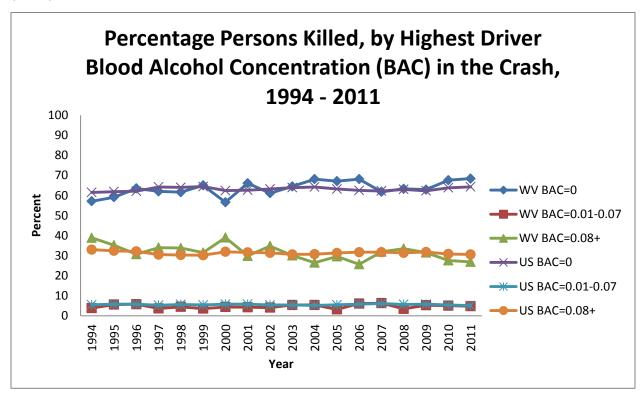
| Age-Adjusted Death Rate per 100,000 Population From Alcohol Related Overdose by Gender |        |               |       |        |               |       |  |  |
|--|--------|---------------|-------|--------|---------------|-------|--|--|
| Voor   |        | West Virginia |       |        | United States |       |  |  |
| Year   | Female | Male          | Total | Female | Male          | Total |  |  |
| 1999-2001  | 0.0    | 0.1           | 0.1   | 0.1    | 0.2           | 0.1   |  |  |
| 2002-2004  | 0.0    | 0.2           | 0.1   | 0.1    | 0.2           | 0.1   |  |  |
| 2005-2007  | 0.0    | 0.1           | 0.1   | 0.1    | 0.4           | 0.3   |  |  |
| 2008-2010  | 0.1    | 0.6           | 0.4   | 0.3    | 1.1           | 0.7   |  |  |
| 1999-2010  | 0.1    | 0.3           | 0.2   | 0.2    | 0.5           | 0.3   |  |  |

Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Apr 24, 2013. ICD-10 Codes: X45, X65, Y15

#### **Motor Vehicle Crashes**

<u>Indicator Description</u>: Motor vehicle accidents involving drivers with a BAC of 0.08+. <u>Why Indicator is Important</u>: Those who drink and drive are a danger to everyone due to alcohol impairing their driving abilities, such as blurred vision, slow reaction times, and impaired memory. This indicator is important because it puts a value on the consequences of alcohol abuse. Alcohol abuse can have negative impacts that affect all facets of one's life from their health to criminal charges. It is important to track these consequences to measure the impact that alcohol abuse has on a state and to evaluate if prevention measures are effective at reducing the negative impacts.

In 2011, 26.9% of persons killed in crashes in West Virginia were by drivers with a blood alcohol concentration (BAC) of 0.08 or higher, which was lower than the national rate of 30.6% (FARS).



| Per  | Persons Killed, by Highest Driver Blood Alcohol Concentration (BAC) in the Crash, 1994 - 2011 in WV |         |                             |         |        |         |        |         |        |
|------|---|---------|-----------------------------|---------|--------|---------|--------|---------|--------|
|      | BAC =   | 0.00    | BAC = 0.01-0.07 BAC = 0.08+ |         | BAC =  | Total   |        |         |        |
| Year | Number  | Percent | Number                      | Percent | Number | Percent | Number | Percent | Number |
| 1994 | 204   | 57.1    | 14                          | 3.9     | 139    | 38.9    | 153    | 42.9    | 356    |
| 1995 | 220   | 59.1    | 21                          | 5.6     | 131    | 35.2    | 152    | 40.9    | 376    |
| 1996 | 219   | 63.5    | 20                          | 5.8     | 106    | 30.7    | 126    | 36.5    | 348    |
| 1997 | 235   | 62.0    | 14                          | 3.7     | 129    | 34.0    | 144    | 38.0    | 381    |
| 1998 | 217   | 61.6    | 16                          | 4.5     | 119    | 33.8    | 135    | 38.4    | 354    |
| 1999 | 256   | 65.0    | 14                          | 3.6     | 124    | 31.5    | 138    | 35.0    | 395    |
| 2000 | 231   | 56.6    | 18                          | 4.4     | 159    | 39.0    | 177    | 43.4    | 411    |
| 2001 | 248   | 66.1    | 16                          | 4.3     | 112    | 29.9    | 127    | 33.9    | 376    |
| 2002 | 267   | 61.1    | 18                          | 4.1     | 152    | 34.8    | 170    | 38.9    | 439    |
| 2003 | 253   | 64.5    | 21                          | 5.4     | 118    | 30.1    | 139    | 35.5    | 394    |
| 2004 | 277   | 68.1    | 22                          | 5.4     | 108    | 26.5    | 130    | 31.9    | 410    |
| 2005 | 249   | 67.1    | 12                          | 3.2     | 110    | 29.6    | 122    | 32.9    | 374    |
| 2006 | 278   | 68.1    | 25                          | 6.1     | 105    | 25.7    | 130    | 31.9    | 410    |
| 2007 | 267   | 61.8    | 27                          | 6.3     | 138    | 31.9    | 165    | 38.2    | 432    |
| 2008 | 238   | 63.3    | 13                          | 3.5     | 126    | 33.5    | 138    | 36.7    | 378    |
| 2009 | 224   | 62.9    | 19                          | 5.3     | 112    | 31.5    | 132    | 37.1    | 357    |
| 2010 | 213   | 67.6    | 16                          | 5.1     | 87     | 27.6    | 102    | 32.4    | 315    |
| 2011 | 229   | 68.4    | 16                          | 4.8     | 90     | 26.9    | 106    | 31.6    | 337    |

# Persons Killed, by Highest Driver Blood Alcohol Concentration (BAC) in the Crash, 1994 - 2011 in US

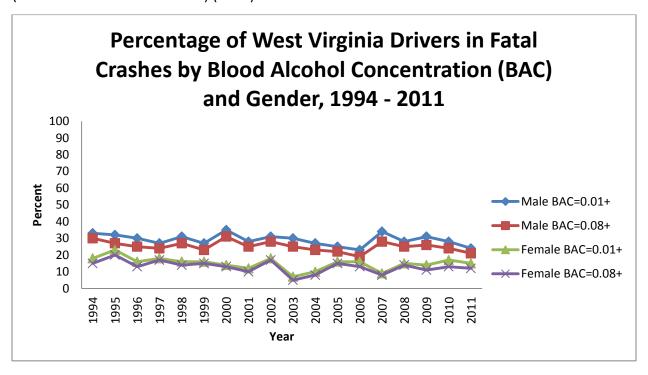
|      | BAC =  | 0.00    | BAC = 0. | 01-0.07 | BAC =  | 0.08+ BAC = 0.01+ |        | 0.01+   | Total  |
|------|--------|---------|----------|---------|--------|-------------------|--------|---------|--------|
| Year | Number | Percent | Number   | Percent | Number | Percent           | Number | Percent | Number |
| 1994 | 24948  | 61.5    | 2236     | 5.5     | 13390  | 33.0              | 15626  | 38.5    | 40716  |
| 1995 | 25768  | 61.9    | 2416     | 5.8     | 13478  | 32.4              | 15893  | 38.1    | 41817  |
| 1996 | 26052  | 62.1    | 2415     | 5.8     | 13451  | 32.1              | 15866  | 37.9    | 42065  |
| 1997 | 26902  | 64.2    | 2216     | 5.3     | 12757  | 30.5              | 14973  | 35.8    | 42013  |
| 1998 | 26477  | 64.0    | 2353     | 5.7     | 12546  | 30.3              | 14899  | 36.0    | 41501  |
| 1999 | 26798  | 64.4    | 2235     | 5.4     | 12555  | 30.2              | 14790  | 35.6    | 41717  |
| 2000 | 26082  | 62.4    | 2422     | 5.8     | 13324  | 31.9              | 15746  | 37.6    | 41945  |
| 2001 | 26334  | 62.6    | 2441     | 5.8     | 13290  | 31.6              | 15731  | 37.4    | 42196  |
| 2002 | 27080  | 63.2    | 2321     | 5.4     | 13472  | 31.4              | 15793  | 36.8    | 43005  |
| 2003 | 27328  | 63.9    | 2327     | 5.4     | 13096  | 30.6              | 15423  | 36.1    | 42884  |
| 2004 | 27413  | 64.2    | 2212     | 5.2     | 13099  | 30.7              | 15311  | 35.8    | 42836  |
| 2005 | 27423  | 63.2    | 2404     | 5.5     | 13582  | 31.3              | 15985  | 36.8    | 43510  |
| 2006 | 26633  | 62.5    | 2479     | 5.8     | 13491  | 31.7              | 15970  | 37.5    | 42708  |
| 2007 | 25611  | 62.2    | 2494     | 6.1     | 13041  | 31.7              | 15534  | 37.8    | 41259  |
| 2008 | 23499  | 63.0    | 2115     | 5.7     | 11711  | 31.4              | 13826  | 37.0    | 37423  |
| 2009 | 21051  | 62.3    | 1972     | 5.8     | 10759  | 31.8              | 12731  | 37.7    | 33883  |
| 2010 | 21005  | 63.8    | 1771     | 5.4     | 10136  | 30.8              | 11906  | 36.2    | 32999  |
| 2011 | 20752  | 64.3    | 1633     | 5.1     | 9878   | 30.6              | 11510  | 35.7    | 32367  |

Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS),

http://www-fars.nhtsa.dot.gov/Trends/TrendsAlcohol.aspx

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. Total Number - Total includes fatalities in crashes in which there was no driver or motorcycle rider present.

In West Virginia males had a higher rate of drivers in fatal crashes by BAC 0.08+ (21%) compared to females (12%). The gender rates were slightly lower than the national rates (males 24% and females 14%) (FARS).



| Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Sex in West Virginia, 1994 - 2011 |        |           |           |        |           |           |  |  |
|---|--------|-----------|-----------|--------|-----------|-----------|--|--|
|   |        | Male      |           |        | Female    |           |  |  |
| Year  | Total  | Pero      | cent      | Total  | Per       | cent      |  |  |
|   | Number | BAC=0.01+ | BAC=0.08+ | Number | BAC=0.01+ | BAC=0.08+ |  |  |
| 1994  | 372    | 33        | 30        | 120    | 18        | 15        |  |  |
| 1995  | 386    | 32        | 27        | 101    | 23        | 20        |  |  |
| 1996  | 352    | 30        | 25        | 114    | 16        | 13        |  |  |
| 1997  | 380    | 27        | 24        | 146    | 18        | 17        |  |  |
| 1998  | 361    | 31        | 27        | 104    | 16        | 14        |  |  |
| 1999  | 390    | 27        | 23        | 122    | 16        | 15        |  |  |
| 2000  | 394    | 35        | 31        | 127    | 14        | 13        |  |  |
| 2001  | 379    | 28        | 25        | 126    | 12        | 10        |  |  |
| 2002  | 426    | 31        | 28        | 149    | 18        | 17        |  |  |
| 2003  | 405    | 30        | 25        | 137    | 7         | 5         |  |  |
| 2004  | 409    | 27        | 23        | 148    | 10        | 8         |  |  |
| 2005  | 380    | 25        | 22        | 115    | 16        | 15        |  |  |
| 2006  | 415    | 23        | 19        | 130    | 16        | 13        |  |  |
| 2007  | 404    | 34        | 28        | 140    | 9         | 8         |  |  |
| 2008  | 374    | 28        | 25        | 102    | 15        | 14        |  |  |
| 2009  | 350    | 31        | 26        | 100    | 14        | 11        |  |  |
| 2010  | 310    | 28        | 24        | 95     | 17        | 13        |  |  |
| 2011  | 340    | 24        | 21        | 119    | 15        | 12        |  |  |

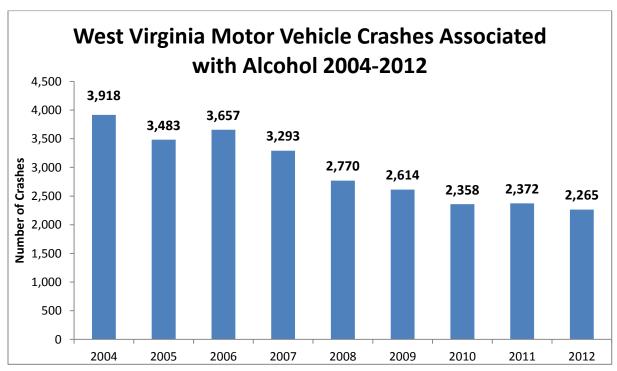
Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Sex in United States, 1994 - 2011

|      | Male   |           |           |        | Female    |           |  |
|------|--------|-----------|-----------|--------|-----------|-----------|--|
| Year | Total  | Pero      | cent      | Total  | Per       | cent      |  |
|      | Number | BAC=0.01+ | BAC=0.08+ | Number | BAC=0.01+ | BAC=0.08+ |  |
| 1994 | 40,233 | 30        | 26        | 13,567 | 17        | 14        |  |
| 1995 | 41,235 | 30        | 25        | 14,184 | 16        | 13        |  |
| 1996 | 41,376 | 29        | 25        | 14,850 | 16        | 13        |  |
| 1997 | 40,954 | 28        | 24        | 14,954 | 15        | 12        |  |
| 1998 | 40,816 | 28        | 23        | 15,089 | 15        | 12        |  |
| 1999 | 41,012 | 28        | 23        | 14,835 | 14        | 12        |  |
| 2000 | 41,795 | 29        | 24        | 14,790 | 16        | 13        |  |
| 2001 | 41,901 | 29        | 24        | 14,919 | 15        | 13        |  |
| 2002 | 42,377 | 29        | 25        | 14,999 | 15        | 12        |  |
| 2003 | 42,586 | 28        | 24        | 15,211 | 14        | 12        |  |
| 2004 | 42,250 | 28        | 24        | 15,384 | 15        | 12        |  |
| 2005 | 43,282 | 28        | 24        | 15,059 | 16        | 13        |  |
| 2006 | 42,223 | 29        | 24        | 14,753 | 18        | 15        |  |
| 2007 | 41,053 | 29        | 24        | 14,184 | 16        | 13        |  |
| 2008 | 37,061 | 29        | 25        | 12,627 | 16        | 13        |  |
| 2009 | 32,882 | 30        | 25        | 11,864 | 16        | 13        |  |
| 2010 | 32,079 | 28        | 24        | 11,859 | 17        | 15        |  |
| 2011 | 31,809 | 28        | 24        | 11,209 | 16        | 14        |  |

Source: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS)

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. Total Number - Total includes fatalities in crashes in which there was no driver or motorcycle rider present.

While the number of motor vehicle crashes associated with alcohol decreased in West Virginia from 3,918 in 2004 to 2,265 in 2012 (42.2% decrease), it still remains a serious problem (WVTAD).



Source: West Virginia Traffic Accident Database (WVTAD)

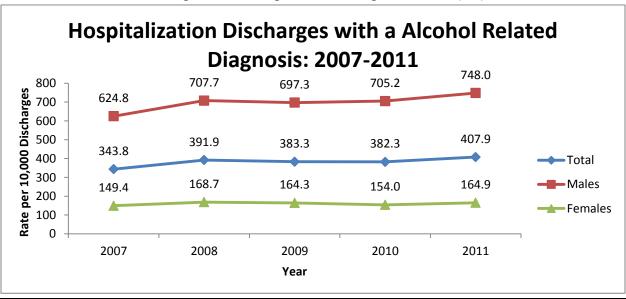
Note: In 2008 a new crash reporting system was implemented.

# **Alcohol Related Hospitalizations**

**Indicator Description**: Hospitalizations associated with alcohol related diagnoses.

Why Indicator is Important: This indicator examines the hospital discharges in West Virginia with a diagnosis of alcohol abuse or dependence. It puts a value on the consequences of alcohol abuse. It is important to track these consequences to measure the impact that alcohol abuse has on a state and to evaluate if prevention measures are effective at reducing the negative impacts. Acute alcohol intoxication, also known as drunkenness or inebriation, is the result of consuming excessive amounts of alcohol. Alcohol dependence, often referred to as alcoholism, is when there are signs of physical addiction to alcohol and the person continues to drink, despite problems with physical health, mental health, and social, family, or job responsibilities.

Hospitalizations for an alcohol related diagnosis in 2011 increased from 343.8 rate per 10,000 discharges in 2007 to 407.9 rate per 10,000 discharges in 2011. Males accounted for 76.4% of all of the alcohol related diagnosis discharges in West Virginia in 2011 (UB).

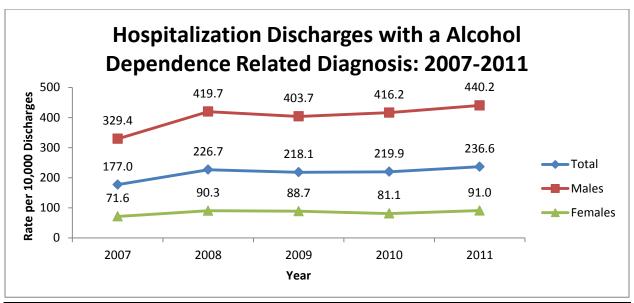


| Hospitalization Discharges with a Alcohol Related Diagnosis: 2007-2011 |         |         |         |         |         |  |  |  |  |
|--|---------|---------|---------|---------|---------|--|--|--|--|
| 2007 2008 2009 2010 2  |         |         |         |         |         |  |  |  |  |
| <b>Total Number of Alcohol Related Discharges</b>                      | 8,841   | 10,203  | 9,859   | 9,789   | 10,559  |  |  |  |  |
| <b>Total Number of Discharges</b>                                      | 257,180 | 260,367 | 257,217 | 256,074 | 258,834 |  |  |  |  |
| Total Rate per 10,000 Discharges                                       | 343.8   | 391.9   | 383.3   | 382.3   | 407.9   |  |  |  |  |
| Total # of Alcohol Related Discharges for Males                        | 6,570   | 7,631   | 7,370   | 7,480   | 8,067   |  |  |  |  |
| Total Number of Discharges for Males                                   | 105,152 | 107,834 | 105,699 | 106,073 | 107,842 |  |  |  |  |
| Rate per 10,000 Discharges for Males                                   | 624.8   | 707.7   | 697.3   | 705.2   | 748.0   |  |  |  |  |
| Total # of Alcohol Related Discharges for Females                      | 2,271   | 2,572   | 2,489   | 2,309   | 2,489   |  |  |  |  |
| Total Number of Discharges for Females                                 | 152,002 | 152,489 | 151,490 | 149,969 | 150,948 |  |  |  |  |
| Rate per 10,000 Discharges for Females                                 | 149.4   | 168.7   | 164.3   | 154.0   | 164.9   |  |  |  |  |

Source: West Virginia Health Care Authority, Uniform Billing Database (UB)

Notes: ICD-9-CM all-listed diagnosis codes: 291, 303, 305.0, 357.5, 425.5, 535.3, 571.0, 571.1, 571.2, 760.71, 790.3, 980.0, E860.0, E860.1. Statistics are based on hospitals that meet the definition of "community hospital" -- nonfederal, short-term, general and other specialty hospitals, including public hospitals and academic medical centers. Excluded facilities are: are federal, rehabilitation, and psychiatric hospitals, as well as alcoholism/chemical dependency treatment facilities. Some years of data have missing gender. Only West Virginia residences were included.

Hospitalization discharges with alcohol dependence relate diagnosis increased from 177.0 rate per 10,000 discharges in 2007 to 236.6 rate per 10,000 discharges in 2011. Males account for 77.5% of all of the alcohol related diagnosis discharges in West Virginia in 2011 (UB).



| Hospitalization Discharges with a Alcohol Dependence Related Diagnosis: 2007-2011 |         |         |         |         |         |  |  |  |
|---|---------|---------|---------|---------|---------|--|--|--|
| 2007 2008 2009 2010 20  |         |         |         |         |         |  |  |  |
| Total Number of Alcohol Related Discharges  | 4,552   | 5,903   | 5,610   | 5,631   | 6,123   |  |  |  |
| Total Number of Discharges  | 257,180 | 260,367 | 257,217 | 256,074 | 258,834 |  |  |  |
| Total Rate per 10,000 Discharges  | 177.0   | 226.7   | 218.1   | 219.9   | 236.6   |  |  |  |
| Total # of Alcohol Related Discharges for Males                                   | 3,464   | 4,526   | 4,267   | 4,415   | 4,747   |  |  |  |
| Total Number of Discharges for Males  | 105,152 | 107,834 | 105,699 | 106,073 | 107,842 |  |  |  |
| Rate per 10,000 Discharges for Males  | 329.4   | 419.7   | 403.7   | 416.2   | 440.2   |  |  |  |
| Total # of Alcohol Related Discharges for Females                                 | 1,088   | 1,377   | 1,343   | 1,216   | 1,373   |  |  |  |
| Total Number of Discharges for Females  | 152,002 | 152,489 | 151,490 | 149,969 | 150,948 |  |  |  |
| Rate per 10,000 Discharges for Females  | 71.6    | 90.3    | 88.7    | 81.1    | 91.0    |  |  |  |

Source: West Virginia Health Care Authority, Uniform Billing Database (UB)

Notes: ICD-9-CM all-listed diagnosis codes: 303.00, 303.01, 303.02, 303.03, 303.90, 303.91, 303.92, 303.93. Statistics are based on hospitals that meet the definition of "community hospital" -- nonfederal, short-term, general and other specialty hospitals, including public hospitals and academic medical centers. Excluded facilities are: are federal, rehabilitation, and psychiatric hospitals, as well as alcoholism/chemical dependency treatment facilities. Some years of data have missing gender. Only West Virginia residences were included.

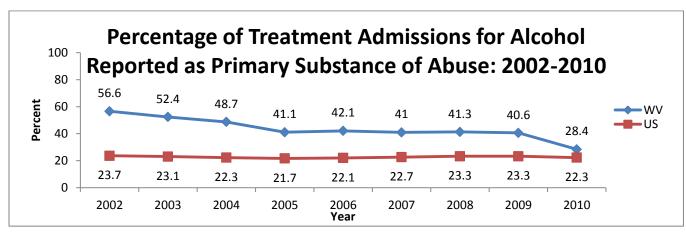
### **Treatment**

<u>Indicator Description</u>: This section describes the number of admissions to state funded facilities for the treatment of alcohol abuse and dependence as a primary substance of abuse and alcohol with a secondary drug as primary substance of abuse.

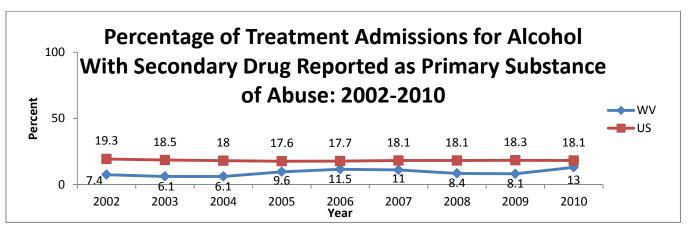
<u>Why Indicator is Important</u>: This indicator is important because it illustrates the proportion of admissions to substance abuse treatment facilities for alcohol treatment, which constitute a burden on public funds. In addition, this data allows providers to focus efforts to address the needs of the people in treatment by their primary substance of abuse or misuse.

The Treatment Episode Data Set (TEDS) annually records 1.8 million admissions to treatment facilities for abuse of alcohol and drugs that are reported to state administrative data systems. The percentage of treatment admissions for alcohol as their primary substance abuse in West Virginia has been nearly double the percent of the United States from 2002-2009 (see Appendix A). However, in 2010 the percentage in West Virginia decreased by 12.2%, narrowing the gap from the national percentage (WV 28.4%, US 22.3%). Alcohol abuse in 2010 accounted for 28.4% of admissions for primary substance abuse and was the second highest reported primary substance abuse among treatment admissions. There was an increase of admission of individuals with alcohol as their primary substance aged 21-35 and a decrease among individuals aged 36 and older from 2002 to 2010. Males have had a much higher percentage of treatment admission for alcohol abuse compared to females from 2002 to 2010, (for example, males 74.1% compared to 25.9% for females in West Virginia in 2010).

The percentage of treatment admissions for alcohol with a secondary drug as their primary substance of abuse in West Virginia has remained relatively low, and has remained lower than the national percentage (2002-2010). Males have consistently had a higher percentage of treatment admissions for alcohol abuse with secondary drug (2002-2010). In 2010 males had a 2.5 times higher percentage than females (see Appendix A) (TEDS).



Source: TEDS



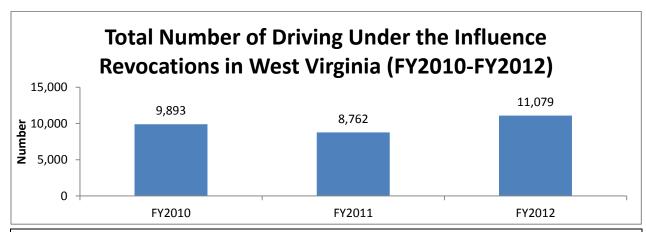
Source: TEDS

#### Crime

<u>Indicator Description</u>: This indicator includes Driving Under the Influence (DUI) revocations and alcohol related crimes.

Why Indicator is Important: Approximately 40 percent of violent crimes in the United States have been linked to alcohol abuse, according to the U.S. Department of Justice on Alcohol and Crime. DUI of alcohol is the more commonly associated crime associated with alcohol consumption. DUI is a criminal offense which is the act of driving a motor vehicle with blood levels of alcohol in excess of 0.08% in West Virginia. It can have serious consequences, including a prison sentence. This indicator is important as it puts a value on the consequences of alcohol abuse. It is important to track these consequences to measure the impact that alcohol abuse has on a state and to evaluate if prevention measures are effective at reducing the negative impacts.

The West Virginia Department of Motor Vehicles (WVDMV) reported that there were 11,079 driving under the influence revocations in West Virginia in the 2012 fiscal year.



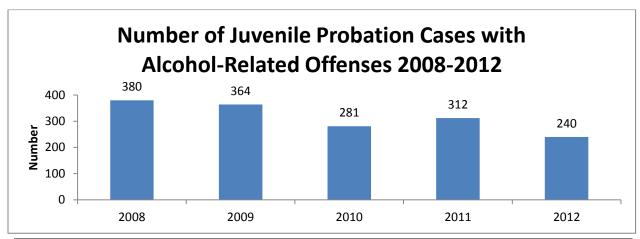
| Driving Under the Influence Revocations in West Virginia (FY2010-FY2012) |        |        |        |  |  |  |  |
|--|--------|--------|--------|--|--|--|--|
|  | FY2010 | FY2011 | FY2012 |  |  |  |  |
| Total DUI Revocations  | 9,893  | 8,762  | 11,079 |  |  |  |  |
| Repeat offenders (those with 2 offenses)                                 | 769    | 1,328  | 1,905  |  |  |  |  |
| Repeat offenders (those with 3 or more offenses)                         | 308    | 495    | 564    |  |  |  |  |
| WV drivers arrested & convicted in other states                          | 440    | 305    | 333    |  |  |  |  |
| Refusals   | 1,339  | 1,324  | 1,656  |  |  |  |  |
| Under age of 21 (BAC .02 and less than .08)                              | 84     | 103    | 129    |  |  |  |  |
| DUI driver had children under age of 16 in vehicle                       | 158    | 169    | 219    |  |  |  |  |
| Bodily injury of someone other than the offender                         | 152    | 140    | 173    |  |  |  |  |
| Involved death of someone other than the offender                        | 18     | 8      | 27     |  |  |  |  |
| Use of drugs   | 848    | 941    | 1,368  |  |  |  |  |
| drugs/controlled substance   | -      | -      | 912    |  |  |  |  |
| drugs/controlled substance combined with alcohol                         | -      | -      | 456    |  |  |  |  |

Source: WV Department of Motor Vehicle (WVDMV)

Notes: All DUI offenses must be reported to the DMV within 48 hours of the incidence. Fiscal Year is from July 1st to June 30th. Subcategories for use of drugs only became available for FY2012.

| Driving Under the Influence Revocations of Commercial Driver's License (CDL) Holders in West Virginia (FY2010-FY2012)            |        |        |        |  |  |  |  |  |
|--|--------|--------|--------|--|--|--|--|--|
|  | FY2010 | FY2011 | FY2012 |  |  |  |  |  |
| Total DUI Revocations for commercial driver's license (CDL) holders  | 431    | 448    | 436    |  |  |  |  |  |
| Offender driving commercial vehicle at time of offense   | 15     | 9      | 12     |  |  |  |  |  |
| Use of drugs   | 17     | 23     | 40     |  |  |  |  |  |
| Source: WV Department of Motor Vehicle (WVDMV)   |        |        |        |  |  |  |  |  |
| Notes: All DUI offenses must be reported to the DMV within 48 hours of the incidence. Fiscal Year is from July 1st to June 30th. |        |        |        |  |  |  |  |  |

The number of juvenile probation cases with alcohol-related offenses decreased between the years 2008 to 2012, from 380 to 240, which is a 36.8% decrease (WVJJDB).



| Number of Juvenile Probation Cases with Alcohol-Related Offenses 2008-2012 |      |      |      |      |      |  |  |  |
|--|------|------|------|------|------|--|--|--|
| Offense Group  | 2008 | 2009 | 2010 | 2011 | 2012 |  |  |  |
| Alcohol: Underage Consumption/Possession                                   | 221  | 142  | 117  | 120  | 87   |  |  |  |
| Beer: Underage Consumption/Possession                                      | 51   | 73   | 45   | 73   | 65   |  |  |  |
| DUI - First Offense  | 23   | 29   | 18   | 21   | 13   |  |  |  |
| DUI - Second Offense   | 0    | 1    | 0    | 0    | 1    |  |  |  |
| DUI - Under 21 with Measurable Alcohol                                     | 9    | 5    | 8    | 10   | 6    |  |  |  |
| DUI - w/ children under 16 in vehicle                                      | 1    | 3    | 4    | 3    | 4    |  |  |  |
| DUI with Death - Misdemeanor   | 0    | 0    | 0    | 0    | 1    |  |  |  |
| DUI with Death - Reckless Disregard - Felony                               | 0    | 1    | 0    | 0    | 0    |  |  |  |
| DUI with Injury - Misdemeanor  | 3    | 1    | 4    | 4    | 5    |  |  |  |
| Give alcohol to person under 21  | 0    | 6    | 2    | 1    | 0    |  |  |  |
| Habitual User Driving Vehicle  | 0    | 0    | 1    | 1    | 0    |  |  |  |
| Intoxication or drinking in public places; illegal                         | 12   | 30   | 22   | 21   | 11   |  |  |  |
| Providing alcohol to underage person not related                           | 0    | 1    | 1    | 1    | 0    |  |  |  |
| Purchase alcohol while under 21  | 33   | 35   | 40   | 54   | 38   |  |  |  |
| Sell or deliver wine unlawfully purchased                                  | 4    | 3    | 0    | 0    | 0    |  |  |  |
| Time restrictions on sale of non-intoxicating beer*                        | 9    | 27   | 8    | 2    | 2    |  |  |  |
| Underage Furnishing Beer   | 0    | 1    | 0    | 0    | 1    |  |  |  |
| Underage person purchasing beer or wine                                    | 14   | 6    | 11   | 1    | 6    |  |  |  |
| Total Alcohol-Related Offenses   | 380  | 364  | 281  | 312  | 240  |  |  |  |

Source: West Virginia Juvenile Justice Database (WVJJDB)

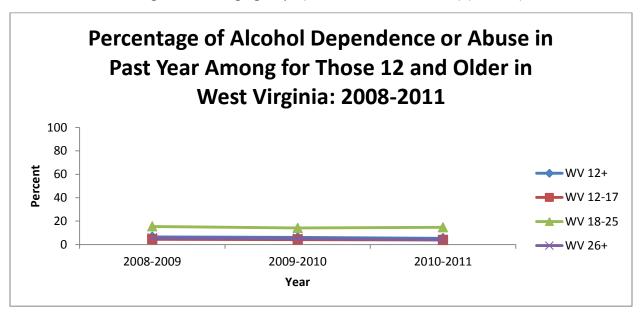
<sup>\*&</sup>quot;Non-intoxicating beer" is defined as cereal malt beverages or products (such as beer, lager beer, ale) containing one half of one percent alcohol by volume but no more than nine and six tenths of alcohol by weight, or twelve percent by volume, whichever is greater.

## **Dependence or Abuse**

<u>Indicator Description</u>: According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) by the American Psychiatric Association (APA), substance dependence is defined as the continued use of the substance despite significant related problems. Alcohol dependence is indicated by evidence of tolerance or withdrawal symptoms, such as tremors, nausea, and anxiety, after the cessation of alcohol consumption. Substance abuse is defined as maladaptive pattern of use exhibited by repeated and significant adverse consequences related to the repeated use of substances. Some adverse consequences of alcohol abuse are the inability to fulfill social or interpersonal obligations, hazardous behavior like drunk driving, and legal problems like driving under the influence.

<u>Why Indicator is Important</u>: Alcohol abuse and dependence can create problems in one's life and those around them. Those who abuse alcohol aren't dependent on alcohol but still have a serious disorder which can cause them to not be able to fulfill responsibilities to family, work and school. This may also lead them to be in more dangerous situations, like drunk driving, legal or social problems and drinking related medical conditions.

Those aged 18-25 reported the highest percentage of alcohol dependence or abuse compared to those aged 12-17 and 26 and older between the years 2008 to 2012 in West Virginia and the United States. This was also true for reported alcohol dependence, those 18-24 reported a rate more than twice as high as other age groups (12-17 and 26 and older) (NSDUH).



| Percentage of Alcohol Dependence or Abuse in Past Year Among Those 12 and Older |  |      |      |      |      |      |  |  |
|---|--|------|------|------|------|------|--|--|
|   | West Virginia United States                                |      |      |      |      |      |  |  |
| Ages  | 2008-2009 2009-2010 2010-2011 2008-2009 2009-2010 2010-201 |      |      |      |      |      |  |  |
| 12-17   | 4.5  | 4.3  | 3.9  | 4.8  | 4.6  | 4.2  |  |  |
| 18-25   | 15.4   | 14.2 | 14.7 | 16.8 | 15.9 | 15.0 |  |  |
| 26 and older  | 5.5  | 5.0  | 4.0  | 6.2  | 6.1  | 5.7  |  |  |
| 12 and older  | 6.5 6.1 5.3 7.4 7.3 6.8                                    |      |      |      |      |      |  |  |

#### Percentage of Alcohol Dependence in Past Year Among Those 12 and Older

|              |           | West Virginia |           | United States |           |           |  |
|--------------|-----------|---------------|-----------|---------------|-----------|-----------|--|
| Ages         | 2008-2009 | 2009-2010     | 2010-2011 | 2008-2009     | 2009-2010 | 2010-2011 |  |
| 12-17        | 2.0       | 1.7           | 1.5       | 1.9           | 1.8       | 1.6       |  |
| 18-25        | 6.6       | 6.1           | 6.3       | 7.0           | 6.6       | 6.3       |  |
| 26 and older | 3.0       | 2.9           | 2.2       | 3.2           | 3.1       | 2.8       |  |
| 12 and older | 3.4       | 3.2           | 2.6       | 3.5           | 3.4       | 3.1       |  |

Source: NSDUH

Note: Dependence or abuse is based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

Among those needing but not receiving treatment for alcohol use in the past year the highest percentage was among those 18-25 years old (13.5%), which was more than three times as high as the other age groups (12-17 and 26 and older) (NSDUH).

# Percentage of Those Needing But Not Receiving Treatment for Alcohol Use in the Past Year Among Those 12 and Older

| 11103c 12 and Older |           |               |           |               |           |           |  |  |  |
|---------------------|-----------|---------------|-----------|---------------|-----------|-----------|--|--|--|
|                     |           | West Virginia |           | United States |           |           |  |  |  |
| Ages                | 2008-2009 | 2009-2010     | 2010-2011 | 2008-2009     | 2009-2010 | 2010-2011 |  |  |  |
| 12-17               | 4.3       | 4.2           | 3.8       | 4.6           | 4.4       | 4.0       |  |  |  |
| 18-25               | 14.3      | 13.2          | 13.5      | 16.1          | 15.3      | 14.5      |  |  |  |
| 26 and older        | 4.8       | 4.5           | 3.9       | 5.8           | 5.7       | 5.4       |  |  |  |
| 12 and older        | 5.9       | 5.5           | 5.1       | 7.0           | 6.9       | 6.4       |  |  |  |

Source: NSDUH

Note: Needing But Not Receiving Treatment refers to respondents classified as needing treatment for alcohol, but not receiving treatment for an alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

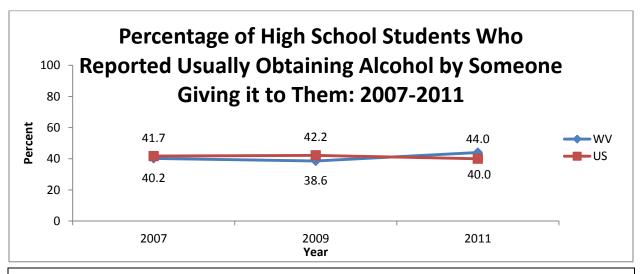
# **Alcohol Risk & Protective Factors**

#### **Access**

**Indicator Description**: Access to alcohol by minors.

<u>Why Indicator is Important</u>: Greater access to alcohol in a community increases the community alcohol abuse risk factor. It is important to have a better understanding of how to limit risk factors while strengthening and increasing access to protective resources to reduce alcohol abuse and create healthier individuals and communities. Understanding access to alcohol for minors is an important piece in prevention interventions.

Female high school students in West Virginia were significantly more likely to obtain alcohol by someone giving it to them in 2007-2011. West Virginia high school students had a higher rate of obtaining alcohol from someone giving it to them compared to the national rate in 2011 (YRBS).



| Percentage | e of High Scho |      | Who Reporte<br>n by Gender a | •               | taining Alcoh<br>07-2011 | ol by Someo      | ne Giving it     |  |
|------------|----------------|------|------------------------------|-----------------|--------------------------|------------------|------------------|--|
|            |                |      | West \                       | /irginia        |                          |                  |                  |  |
|            | Total          | Ger  | nder                         |                 | Grade                    |                  |                  |  |
| Year       | Total          | Male | Female                       | 9 <sup>th</sup> | 10 <sup>th</sup>         | 11 <sup>th</sup> | 12 <sup>th</sup> |  |
| 2007       | 40.2           | 29.6 | 51.1                         | 41.2            | 43.8                     | 42.3             | NA               |  |
| 2009       | 38.6           | 30.9 | 46.5                         | 41.3            | 34.9                     | 41.1             | 36.5             |  |
| 2011       | 44.0           | 37.2 | 51.3                         | 44.4            | 49.4                     | 40.5             | 42.7             |  |
|            |                |      | United                       | l States        |                          |                  |                  |  |
|            | Total          | Ger  | nder                         |                 | Gra                      | ade              |                  |  |
| Year       | Total          | Male | Female                       | 9 <sup>th</sup> | 10 <sup>th</sup>         | 11 <sup>th</sup> | 12 <sup>th</sup> |  |
| 2007       | 41.7           | 33.8 | 49.7                         | 43.4            | 43.3                     | 43.7             | 37.4             |  |
| 2009       | 42.2           | 35.0 | 49.8                         | 46.5            | 41.6                     | 41.3             | 40.6             |  |

2011 Source: YRBS 40.0

35.0

Note: Students who drank alcohol during 30 days before the survey and obtained the alcohol they drank by someone giving it to them.

45.7

39.3

42.3

37.9

41.3

# **Perception of Harm**

Indicator Description: The perception of harm from drinking excessive amounts of alcohol. Why Indicator is Important: The perception of harm from drinking excessive amounts of alcohol can influence one's decision to use alcohol. In families where parents abuse alcohol or are tolerant of children's use, the more likely they are to abuse alcohol as adolescents. The risk is further increased if a parent involves children in their own alcohol using behavior. It is important to have a better understanding of how to limit risk factors while strengthening and increasing access to protective resources to reduce alcohol abuse and create healthier individuals and communities. Understanding perception of harm from drinking excessive amounts of alcohol is associated with alcohol use, which can be used in prevention interventions.

Persons aged 18 to 25 years in West Virginia and in the United States reported having the lowest perceived risk of having five or more alcohol beverages once or twice a week compared to those 12-17 and 26 and older (NSDUH).

| Percentage of Those with Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic |
|--|
| Beverage Once or Twice a Week Among Those 12 and Older   |

|              | West Virginia |           |           | United States |           |           |  |  |
|--------------|---------------|-----------|-----------|---------------|-----------|-----------|--|--|
| Ages         | 2008-2009     | 2009-2010 | 2010-2011 | 2008-2009     | 2009-2010 | 2010-2011 |  |  |
| 12-17        | 38.8          | 38.9      | 38.1      | 39.8          | 40.0      | 40.6      |  |  |
| 18-25        | 32.1          | 34.0      | 32.1      | 33.1          | 33.4      | 34.1      |  |  |
| 26 and older | 45.7          | 46.2      | 42.3      | 43.5          | 44.5      | 44.3      |  |  |
| 12 and older | 43.6          | 44.1      | 40.7      | 41.8          | 42.6      | 42.6      |  |  |

Source: NSDUH

Note: 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

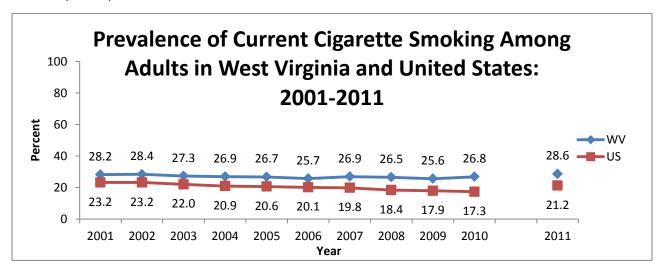
# **Tobacco Consumption**

#### **Current Use**

<u>Indicator Description</u>: Current use of tobacco products on at least one or more occasion in the past 30 days.

<u>Why Indicator is Important</u>: According to the CDC tobacco use is the most preventable cause of death in the United States. Smoking harms nearly every organ in your body and causes many diseases which reduce the health of smokers in general. 1 of every 5 deaths each year in the United States is caused by cigarette smoking and secondhand smoke exposure.

West Virginia had the second highest prevalence of current smoking among adults in the nation in 2011. West Virginia had a significantly higher rate of current smoking than the United States in 2011. Males in West Virginia had a significantly higher rate of current smoking than females. Adults 18-54 had a significantly higher prevalence of smoking than adults 55 and older in 2011. Adults 65 and older had a significantly lower prevalence of current use of cigarettes smoking than all other age groups in 2011. Adults with less than a high school education had a significantly higher prevalence of current smoking than adults with an education higher than high school in 2011. Adults in West Virginia with an income of less than \$15,000 have a significantly higher prevalence of current smoking than all other income groups in 2011 (BRFSS).



| Preva | alence of C | urrent Ciga |        | _      | -          | Gender ar | nd Age in V | Vest Virgin | ia and |  |  |
|-------|-------------|-------------|--------|--------|------------|-----------|-------------|-------------|--------|--|--|
|       |             |             | U      |        | es 2001-20 | 11        |             |             |        |  |  |
|       |             |             |        | West \ | /irginia   |           |             |             |        |  |  |
|       | Total       | Ger         | nder   |        | Age        |           |             |             |        |  |  |
| Year  | Total       | Male        | Female | 18-24  | 25-34      | 35-44     | 45-54       | 55-64       | 65+    |  |  |
| 2001  | 28.2        | 28.9        | 27.6   | 41.1   | 35.0       | 35.4      | 28.1        | 23.7        | 11.2   |  |  |
| 2002  | 28.4        | 29.8        | 27.2   | 38.9   | 35.9       | 34.8      | 30.7        | 21.3        | 12.3   |  |  |
| 2003  | 27.3        | 27.6        | 27.1   | 36.2   | 36.5       | 34.5      | 30.1        | 21.0        | 10.8   |  |  |
| 2004  | 26.9        | 27.5        | 26.4   | 37.6   | 32.7       | 35.7      | 28.6        | 21.0        | 10.0   |  |  |
| 2005  | 26.7        | 27.4        | 26.0   | 38.2   | 34.4       | 29.1      | 28.4        | 25.3        | 10.5   |  |  |
| 2006  | 25.7        | 25.4        | 26.1   | 36.2   | 34.3       | 27.9      | 26.6        | 22.1        | 12.8   |  |  |
| 2007  | 26.9        | 28.4        | 25.4   | 34.9   | 36.2       | 33.1      | 29.2        | 22.4        | 11.5   |  |  |
| 2008  | 26.5        | 26.0        | 27.0   | 41.2   | 38.7       | 29.9      | 28.0        | 20.4        | 9.5    |  |  |
| 2009  | 25.6        | 27.7        | 23.6   | 30.7   | 41.6       | 26.9      | 27.4        | 21.8        | 10.7   |  |  |
| 2010  | 26.8        | 28.3        | 25.4   | 34.5   | 36.8       | 28.9      | 32.4        | 23.9        | 10.8   |  |  |
| 2011  | 28.6        | 31.5        | 25.9   | 38.5   | 41.4       | 34.7      | 33.6        | 21.0        | 10.9   |  |  |
|       |             |             |        | United | States     |           |             |             |        |  |  |
|       | Takal       | Ger         | nder   |        |            | A         | ge          |             |        |  |  |
| Year  | Total       | Male        | Female | 18-24  | 25-34      | 35-44     | 45-54       | 55-64       | 65+    |  |  |
| 2001  | 23.2        | 25.6        | 21.4   | 30.8   | 26.7       | 27.5      | 24.6        | 20.1        | 10.1   |  |  |
| 2002  | 23.2        | 25.8        | 20.8   | 31.2   | 26.2       | 27.2      | 25.2        | 20.9        | 10.1   |  |  |
| 2003  | 22.0        | 24.8        | 20.2   | 29.6   | 25.4       | 25.6      | 24.3        | 19.8        | 9.5    |  |  |
|       | 1           |             |        |        | 1          | 1         |             | 1           |        |  |  |

Sources: WV Health Statistics Center, Behavioral Risk Factor Surveillance System and CDC BRFSS website (WV data is estimated prevalence and the US data is median prevalence).

28.4

26.1

26.8

24.0

22.3

23.2

19.9

24.0

26.3

24.7

24.2

23.9

23.7

23.8

23.4

29.2

23.9

23.2

21.2

20.4

20.0

18.1

18.3

22.8

22.3

23.1

22.2

22.3

21.0

20.5

19.5

23.8

18.5

18.8

16.5

18.0

16.8

16.2

16.0

18.8

9.3

8.9

8.6

9.0

8.2

8.2

8.4

9.2

2004

2005

2006

2007

2008

2009

2010

2011

20.9

20.6

20.1

19.8

18.4

17.9

17.3

21.2

23.1

22.1

22.2

21.2

20.3

19.6

18.5

23.6

19.1

19.2

18.4

18.4

16.7

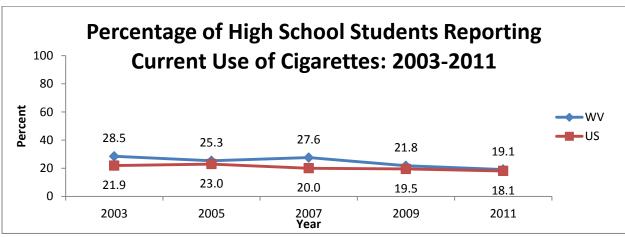
16.7

15.8

18.8

Note: Current Cigarette Smoking is defined as smoking at least one cigarette in the last 30 days. In 2011 there were changes made to the weighting methodology and the addition of the cell phone sampling frame, therefore 2011 prevalence data should not be directly comparable to previous years of BRFSS data.

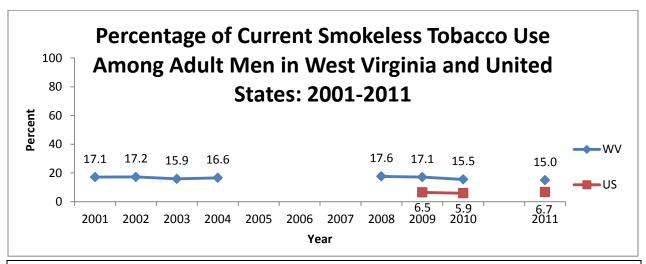
West Virginia had a slightly higher percentage of current use of cigarettes among high school students compared to the nation (2003-2011). Male high school students in West Virginia had a higher rate of current smoking (21.8%) compared to females (16.3%) in 2011 (YRBS).



|      | _     |      | Reporting Curi<br>20 |                 | ,                |                  |                  |
|------|-------|------|----------------------|-----------------|------------------|------------------|------------------|
|      |       |      | West V               | 'irginia        |                  |                  |                  |
|      | Total | Ge   | nder                 |                 | Gra              | ade              |                  |
| Year | Total | Male | Female               | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003 | 28.5  | 25.6 | 31.4                 | 23.9            | 24.1             | 32.8             | 34.7             |
| 2005 | 25.3  | 25.6 | 24.8                 | 26.6            | 23.1             | 25.6             | 26.9             |
| 2007 | 27.6  | 26.7 | 28.4                 | 25.4            | 27.0             | 29.9             | 27.7             |
| 2009 | 21.8  | 21.2 | 22.2                 | 16.4            | 19.9             | 24.2             | 27.9             |
| 2011 | 19.1  | 21.8 | 16.3                 | 17.7            | 16.2             | 21.5             | 21.8             |
|      |       |      | United               | States          |                  |                  |                  |
|      | Total | Ge   | nder                 | Grade           |                  |                  |                  |
| Year | Total | Male | Female               | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003 | 21.9  | 21.8 | 21.9                 | 17.4            | 21.8             | 23.6             | 26.2             |
| 2005 | 23.0  | 22.9 | 23.0                 | 19.7            | 21.4             | 24.3             | 27.6             |
| 2007 | 20.0  | 21.3 | 18.7                 | 14.3            | 19.6             | 21.6             | 26.5             |
| 2009 | 19.5  | 19.8 | 19.1                 | 13.5            | 18.3             | 22.3             | 25.2             |
| 2011 | 18.1  | 19.9 | 16.1                 | 13.0            | 15.6             | 19.3             | 25.1             |

Note: Current Use is defined as having reported any cigarette use in the past 30 Days.

West Virginia had the fourth highest current smokeless tobacco prevalence in the nation and the third highest current smokeless tobacco prevalence among males in the nation in 2011. West Virginia had a significantly higher prevalence of current smokeless tobacco compared to the United States. Males had a significantly higher prevalence of current smokeless tobacco use than females. West Virginia male adults 18-54 had a significantly higher prevalence of current smokeless tobacco use than adults 55 and older in 2011. Adult males with less than a high school education had a significantly higher prevalence of current smokeless tobacco use than male adults with a college education in 2011 (BRFSS).



#### Percentage of Current Smokeless Tobacco Use among Adult Men by Age in West Virginia and United States: 2001-2011 **West Virginia** Age Men 18-24 25-34 35-44 45-54 55-64 65+ Year 2001 17.1 14.2 26.0 21.2 13.1 16.3 10.9 2002 17.2 16.7 26.3 21.7 16.1 12.5 9.0 \*8.3 12.4 2003 15.9 26.3 22.1 12.6 12.3 2004 16.6 \*16.9 24.7 20.9 16.7 10.8 8.7 2005 NA NA NA NA NA NA NA NA NA 2006 NA NA NA NA NA 2007 NA NA NA NA NA NA NA 2008 17.6 \*23.1 23.9 21.5 14.0 14.0 11.3 17.1 \*19.4 22.0 24.3 20.7 2009 10.9 6.2 2010 20.9 15.5 16.3 22.6 15.4 9.5 8.6 7.1 2011 15.0 16.7 18.8 22.8 17.6 9.0 **United States** Age 18-24 25-34 35-44 45-54 55-64 Year Men 65+

Sources: WV Health Statistics Center, Behavioral Risk Factor Surveillance System and CDC BRFSS website (WV data is estimated prevalence and the US data is mean prevalence).

7.8

7.6

8.6

5.3

5.2

6.0

4.1

3.6

4.0

3.3

3.0

3.5

9.3

8.0

8.7

Note: Current smokeless tobacco use is defined as using smokeless tobacco every day or some days. The prevalence of smokeless tobacco use among adult women is unreliable. The survey question on smokeless tobacco was added beginning in 2009 for all states. Prior to 2009, this question was a state-added question. WV data on smokeless tobacco use was not available in 2005, 2006, and 2007. In 2011 there were changes made to the weighting methodology and the addition of the cell phone sampling frame, therefore 2011 prevalence data should not be directly comparable to previous years of BRFSS data. NA= Data not available.

6.5

5.9

6.7

8.9

7.9

9.3

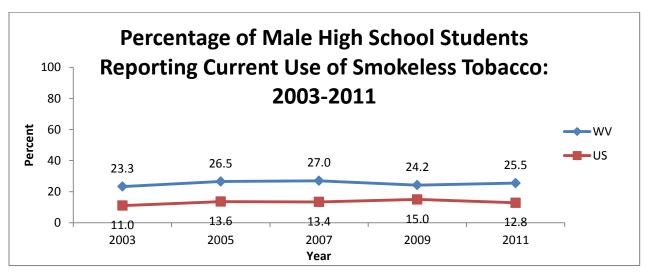
2009

2010

2011

West Virginia had the second highest ranking for male smokeless tobacco use among high school students in the nation in 2011. The percentage of male smokeless tobacco users was significantly higher than the national percentage from 2003 to 2011 (YRBS).

<sup>\*</sup> Estimates may be unreliable.



#### Percentage of Male High School Students Reporting Current Use of Smokeless Tobacco by Grade: 2003-2011 **West Virginia** Males by Grade Male 9<sup>th</sup> 10<sup>th</sup> **11**<sup>th</sup> 12<sup>th</sup> Year 2003 23.3+ 18.0 21.5† 24.9† 28.6† 2005 26.5+ 29.5+ 22.4† 22.9 31.8† 2007 27.0† 28.3† 28.4† 26.9† NA 2009 24.2† 25.2+ 20.2 27.5+ 25.5 2011 25.5+ 26.0+ 23.4+ 26.4 26.3+ **United States** Males by Grade Male 9<sup>th</sup> 10<sup>th</sup> 11<sup>th</sup> 12<sup>th</sup> Year 12.7 2003 11.0 9.1 9.6 13.3 2005 13.6 11.8 12.8 14.8 15.5 2007 15.9 13.4 10.4 14.4 13.3 2009 15.0 10.7 13.9 18.9 18.1 2011 12.8 9.6 12.1 15.0 14.5

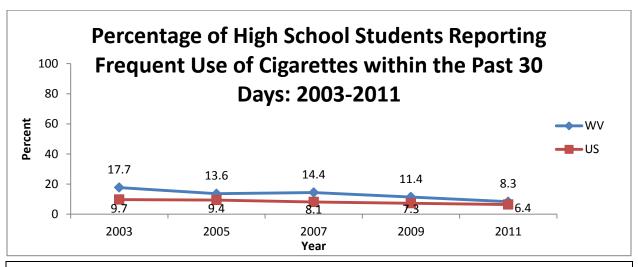
Source: YRBS

Note: Current use is defined as reporting any smokeless tobacco use in the past 30 Days. NA = data not available. Significantly higher is indicated by "t"

## **Frequent Use**

<u>Indicator Description</u>: Frequent use is defined as smoking at least 20 days of the past 30 days. <u>Why Indicator is Important</u>: Tobacco use is linked to several negative outcomes including cancer, cardiovascular disease, lung diseases, as well as death.

West Virginia high school students had a higher rate of frequent smoking from 2003-2011, but it was only significantly higher from 2003-2009. In 2011 male high school students in West Virginia had a higher percentage of frequent smokers than females (YRBS).



Percentage of High School Students Reporting Frequent Use of Cigarettes within the Past 30 Days by Gender and Grade: 2003-2011

| West Virginia |       |        |        |                 |                  |                  |                  |  |
|---------------|-------|--------|--------|-----------------|------------------|------------------|------------------|--|
|               | T     | Gender |        | Grade           |                  |                  |                  |  |
| Year          | Total | Male   | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |
| 2003          | 17.7  | 16.1   | 19.3   | 13.2            | 12.6             | 21.3             | 24.8             |  |
| 2005          | 13.6  | 14.6   | 12.4   | 14.8            | 13.3             | 14.2             | 12.9             |  |
| 2007          | 14.4  | 14.2   | 14.5   | 12.0            | 12.8             | 16.0             | 17.3             |  |
| 2009          | 11.4  | 11.0   | 11.7   | 7.7             | 8.7              | 14.0             | 16.5             |  |
| 2011          | 8.3   | 9.6    | 7.0    | 7.1             | 6.0              | 10.4             | 10.5             |  |

### **United States**

| Takal |       | Gender |        | Grade           |                         |                  |                  |  |
|-------|-------|--------|--------|-----------------|-------------------------|------------------|------------------|--|
| Year  | Total | Male   | Female | 9 <sup>th</sup> | <b>10</b> <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |
| 2003  | 9.7   | 9.6    | 9.7    | 6.3             | 9.2                     | 11.2             | 13.1             |  |
| 2005  | 9.4   | 9.3    | 9.3    | 6.9             | 7.7                     | 10.3             | 13.2             |  |
| 2007  | 8.1   | 8.7    | 7.4    | 4.3             | 7.0                     | 10.1             | 12.2             |  |
| 2009  | 7.3   | 8.0    | 6.4    | 4.7             | 5.7                     | 8.3              | 11.2             |  |
| 2011  | 6.4   | 7.4    | 5.4    | 3.3             | 4.3                     | 7.7              | 10.8             |  |

Source: YRBS

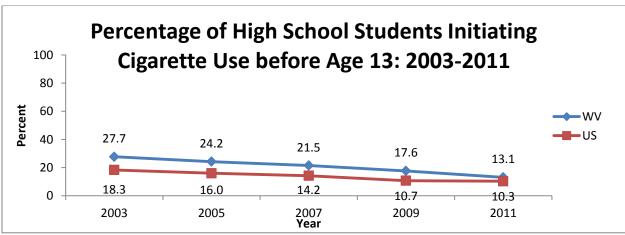
Note: Frequent use is defined as smoked cigarettes on at least 20 days of the past 30 days  $\,$ 

# Age of Initial Use

<u>Indicator Description</u>: This indicator captures the percentage of students who reported their initial use of tobacco before the age of 13.

<u>Why Indicator is Important</u>: Smoking during adolescence is associated with a greater increase of other risky behaviors such as high risk sexual behavior, use of alcohol, marijuana and other drugs. According to a report from the Surgeon General in 2012, 88% of daily adult smokers reported initial use of tobacco by the age of 18 years.

High school students in West Virginia had a significantly higher percentage of initiating tobacco use before the age of 13 than the national rate from 2003-2009. Male students had a higher rate of initiating tobacco use before age 13 from 2003-2011 than females (YRBS).



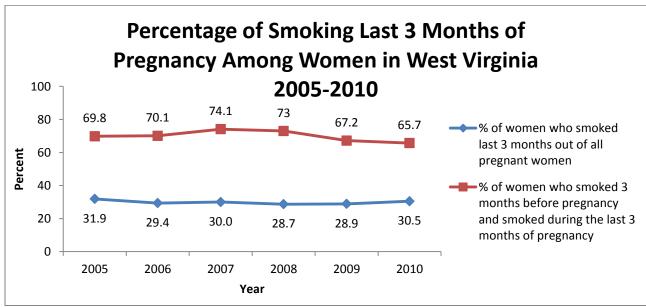
|      |       |      | 2003   | -2011           |                  |                  |                  |
|------|-------|------|--------|-----------------|------------------|------------------|------------------|
|      |       |      | West \ | /irginia        |                  |                  |                  |
|      | Total | Gei  | nder   |                 | Gra              | ade              |                  |
| Year | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003 | 27.7  | 28.1 | 27.4   | 27.3            | 21.8             | 27.4             | 35.8             |
| 2005 | 24.2  | 26.1 | 22.0   | 29.4            | 26.1             | 20.7             | 18.4             |
| 2007 | 21.5  | 23.4 | 19.5   | 24.6            | 23.2             | 21.1             | 15.0             |
| 2009 | 17.6  | 19.5 | 15.2   | 21.1            | 20.6             | 17.2             | 9.4              |
| 2011 | 13.1  | 14.3 | 11.9   | 15.1            | 14.9             | 12.5             | 9.4              |
|      |       |      | United | States          | •                |                  |                  |
|      | Tatal | Gei  | nder   | Grade           |                  |                  |                  |
| Year | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003 | 18.3  | 20.0 | 16.4   | 19.3            | 20.1             | 16.0             | 16.5             |
| 2005 | 16.0  | 18.3 | 13.6   | 18.6            | 16.0             | 14.4             | 13.9             |
| 2007 | 14.2  | 16.4 | 11.9   | 16.3            | 14.3             | 12.0             | 13.3             |
| 2009 | 10.7  | 11.8 | 9.4    | 12.1            | 11.2             | 10.3             | 8.6              |
| 2011 | 10.3  | 12.0 | 8.4    | 12.1            | 10.1             | 9.8              | 8.2              |

## **Tobacco Use During Pregnancy**

<u>Indicator Description</u>: This indicator examines the prevalence of smoking during the last 3 months of pregnancy.

<u>Why Indicator is Important</u>: Both mother and baby are harmed by smoking during pregnancy. Some of the health problems caused by smoking during pregnancy are: pregnancy complication, premature birth, low birth weight, stillbirth, sudden infant death syndrome (SIDS), and birth defects such as a cleft lip or palate. Smoking cessation programs for pregnancy can help to reduce the percentage of women who are pregnant and smoking.

Among all pregnant women in West Virginia 30.5% smoked the last three months of pregnancy in 2010. However, among pregnant women who smoked three months before pregnancy 65.7% smoked the last three months of pregnancy in 2010. The percentage of low birth weight infants was significantly higher among those who reported smoking the last three months of their pregnancy from 2005-2010. Pregnant women receiving Medicaid for prenatal care and/or delivery had a significantly higher rate of smoking the last three months of pregnancy than pregnant women who didn't receive Medicaid for prenatal care and/or delivery had a significantly higher rate of smoking three months before pregnancy than pregnant women who didn't receive Medicaid for prenatal care and/or delivery from 2005-2010 (PRAMS).



| Percentage of Smoking Last 3 Months of Pregnancy Among Women in West Virginia 2005-2010          |      |      |      |      |      |      |  |  |
|--|------|------|------|------|------|------|--|--|
| 2005 2006 2007 2008 2009 201   |      |      |      |      |      |      |  |  |
| % of women who smoked last 3 month out of all pregnant women                                     | 31.9 | 29.4 | 30.0 | 28.7 | 28.9 | 30.5 |  |  |
| % of women who smoked 3 months before pregnancy and smoked during the last 3 months of pregnancy | 69.8 | 70.1 | 74.1 | 73   | 67.2 | 65.7 |  |  |
| % of women who smoked 3 months before pregnancy and quit before the last 3 months of pregnancy   | 30.2 | 29.9 | 25.9 | 27   | 32.8 | 34.3 |  |  |
| Source: PRAMS  |      |      |      |      |      |      |  |  |

| •  | • •          | •           | -            | •            | Status of Wo  | Jilieli tile |  |  |
|--|--------------|-------------|--------------|--------------|---------------|--------------|--|--|
| Last 3 Months of Pregnancy in West Virginia 2005-2010  2005 2006 2007 2008 2009 2010 |              |             |              |              |               |              |  |  |
| Smoked   | 12.4         | 13.2        | 12.4         | 12.6         | 12.7          | 13.0         |  |  |
| Non-Smoker   | 6.8          | 7.0         | 7.0          | 7.0          | 6.3           | 6.2          |  |  |
| Percentage of Wome   | en Smoking L | ast 3 Month | s of Pregnar | ncy by Medic | aid for Pren  | atal Care    |  |  |
| aı   | nd/or Delive | y Payment i | n West Virg  | inia 2005-20 | 10            |              |  |  |
|  | 2005         | 2006        | 2007         | 2008         | 2009          | 2010         |  |  |
| Medicaid   | 43.9         | 42          | 43.6         | 38.2         | 39.6          | 42.8         |  |  |
| Non-Medicaid   | 12.2         | 10          | 9.1          | 14.4         | 11            | 9.7          |  |  |
| Percentage of Wome   | n Smoking 3  | Months Bef  | ore Pregnan  | cv bv Medi   | caid for Prer | natal Care   |  |  |
| •  | nd/or Delive |             | •            |              |               |              |  |  |
|  | 2005         | 2006        | 2007         | 2008         | 2009          | 2010         |  |  |
| Medicaid   | 58.7         | 55.3        | 54.2         | 49.9         | 55            | 49.9         |  |  |
| Non-Medicaid   | 23.8         | 23.9        | 21.6         | 25.2         | 25            | 25.2         |  |  |

# **Tobacco Consequences**

## **Economic Costs of Cigarettes**

<u>Indicator Description</u>: This indicator is an estimate of the economic costs of smoking cigarettes (the costs estimates do not include smokeless tobacco, cigars, pipes, maternal smoking, smoking related neonatal illnesses, secondhand smoke exposure, tobacco related fire deaths, and damages).

<u>Why Indicator is Important</u>: Tobacco use costs the United States billions of dollars every year in medical expenses and lost productivity. This indicator is important because it describes the economic costs of smoking cigarettes.

#### What smokers pay out-of-pocket for cigarettes

The average West Virginia adult cigarette smoker consumes about 1.5 packs of cigarettes per day. The price of a pack of cigarettes was \$0.64 in 1980 and \$3.70 in 2009. By multiplying the packs smoked per year by the cost per pack of cigarettes, the cost per smoker in 1980 was about \$364, and in 2009 it was about \$2,121 per year. Over 30 years of smoking, the average West Virginia adult smoker would have spent about \$31,000 on cigarettes (WVHSC, SAMMEC).

Forecasting into the future, the price of a pack of cigarettes is conservatively projected to be about \$14.82 in 2039. In the year 2039, the average smoker could spend over \$7,200 per year on cigarettes, and the average West Virginia adult smoker may be spending over \$122,000 on cigarettes over a 30 year time period, 2010-2039 (WVHSC, SAMMEC).

#### What society pays for cigarette smoking

During the years 2006-2010, the estimated annual direct health care costs caused by deaths and illnesses from smoking were \$709 million. During those years, the estimated annual lost productivity (lost wages and other economic contributions of those who died early) amounted to \$1.07 billion. Combined, these smoking-related costs totaled \$1.778 billion annually. If viewed as a cost per pack of cigarettes, it is about \$9 per pack. When expressed per smoker, it is about \$4,676 per adult smoker (18 and older) in West Virginia (WVHSC, SAMMEC).

#### What employers pay for cigarette smoking

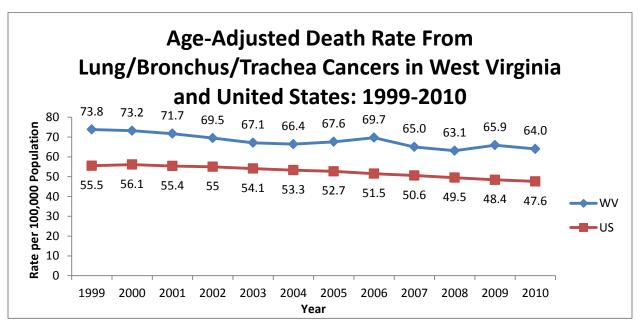
It is estimated that the annual excess cost to employ a smoker is \$5,816, based on absenteeism, presenteesim, smoking breaks, healthcare costs and pension benefits for smokers (Berman, M et al. Estimating the cost of a smoking employee. Tobacco Control, online June 3, 2013).

### **Tobacco-Related Mortality**

<u>Indicator Description</u>: Mortality rates for diseases that tobacco use is known to be a cause of death.

Why Indicator is Important: According to the CDC, tobacco use causes thousands of deaths from numerous diseases every year. Tobacco caused more deaths each year than by all deaths from human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined. This indicator demonstrates the harmful effects of tobacco use, which can be used for prevention and cessation programs. This indicator is important because West Virginia has one of the highest smoking prevalence rates in the United States and it is important to measure the consequences of tobacco consumption in order to focus prevention efforts to reduce this burden.

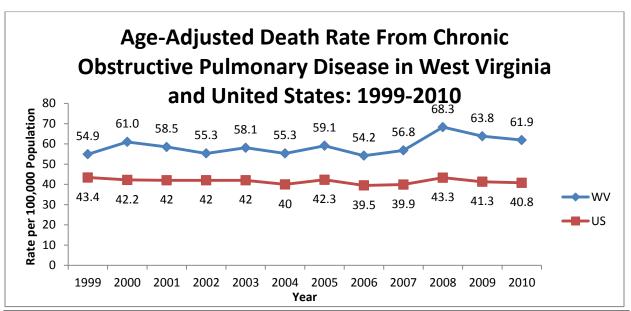
West Virginia had a higher age-adjusted rate of death for lung/bronchus/trachea cancers from 1999-2010 than the national rate. Males had a significantly higher death rate than females for lung/bronchus/trachea cancers for each year and for the combined years for 1999-2010 (VSS).



| Age-Adjuste | d Death Rate p | er 100,000 Pop | ulation From L | ung/Bronchus/ | Trachea Cance | rs by Gender |
|-------------|----------------|----------------|----------------|---------------|---------------|--------------|
| Year        |                | West Virginia  |                | United States |               |              |
| Tear        | Female         | Male           | Total          | Female        | Male          | Total        |
| 1999        | 53.5           | 103.1          | 73.8           | 40.2          | 76.9          | 55.5         |
| 2000        | 51.7           | 103.5          | 73.2           | 41.3          | 76.7          | 56.1         |
| 2001        | 55.5           | 91.8           | 71.7           | 41.1          | 75.3          | 55.4         |
| 2002        | 50.3           | 94.9           | 69.5           | 41.6          | 73.5          | 55           |
| 2003        | 49.8           | 91.1           | 67.1           | 41.3          | 71.8          | 54.1         |
| 2004        | 48.5           | 92.1           | 66.4           | 40.9          | 70.2          | 53.3         |
| 2005        | 50.3           | 91.6           | 67.6           | 40.6          | 69.1          | 52.7         |
| 2006        | 52.9           | 91.2           | 69.7           | 40.1          | 67            | 51.5         |
| 2007        | 49.7           | 85.7           | 65.0           | 40.1          | 64.9          | 50.6         |
| 2008        | 50.1           | 80.4           | 63.1           | 39.1          | 63.5          | 49.5         |
| 2009        | 53.0           | 83.2           | 65.9           | 38.6          | 61.4          | 48.4         |
| 2010        | 48.8           | 83.5           | 64.0           | 38.1          | 60.3          | 47.6         |
| 1999-2010   | 51.1           | 90.8           | 67.9           | 40.1          | 68.8          | 52.2         |

Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Apr 24, 2013. ICD-10 codes: C33-C34

West Virginia had a higher age-adjusted rate of death from COPD than the U.S. from 1999 to 2010. Chronic obstructive pulmonary disease (COPD) death rates are significantly higher for males for the combined years of 1999-2010 and for 1999 than females (VSS).

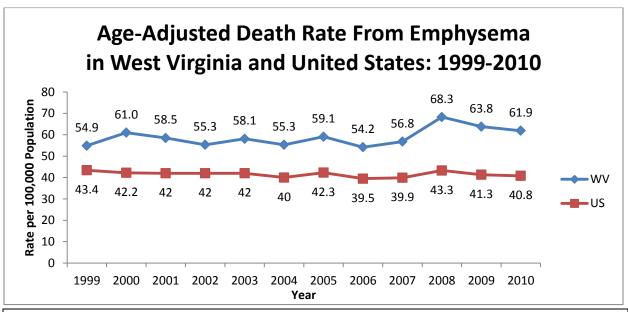


# Age-Adjusted Death Rate per 100,000 Population From Chronic Obstructive Pulmonary Disease by Gender

| Voor      |        | West Virginia |       |        | <b>United States</b> |       |
|-----------|--------|---------------|-------|--------|----------------------|-------|
| Year      | Female | Male          | Total | Female | Male                 | Total |
| 1999      | 43.2   | 76.7          | 54.9  | 35.3   | 57                   | 43.4  |
| 2000      | 52.4   | 77.9          | 61.0  | 35.2   | 54.2                 | 42.2  |
| 2001      | 50.2   | 73.9          | 58.5  | 35.5   | 52.9                 | 42    |
| 2002      | 47.2   | 69.6          | 55.3  | 35.6   | 52.8                 | 42    |
| 2003      | 52.0   | 69.8          | 58.1  | 36.1   | 51.7                 | 42    |
| 2004      | 47.8   | 69.1          | 55.3  | 34.5   | 49                   | 40    |
| 2005      | 50.7   | 74.4          | 59.1  | 36.8   | 51                   | 42.3  |
| 2006      | 49.1   | 63.2          | 54.2  | 34.7   | 47.3                 | 39.5  |
| 2007      | 49.5   | 69.4          | 56.8  | 34.9   | 47.7                 | 39.9  |
| 2008      | 61.4   | 79.4          | 68.3  | 38.2   | 51.2                 | 43.3  |
| 2009      | 57.9   | 73.8          | 63.8  | 36.7   | 48.4                 | 41.3  |
| 2010      | 53.9   | 74.4          | 61.9  | 36.4   | 47.6                 | 40.8  |
| 1999-2010 | 51.3   | 72.6          | 59.0  | 35.8   | 50.7                 | 41.5  |

Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Apr 24, 2013. ICD-10 codes: J40-J44

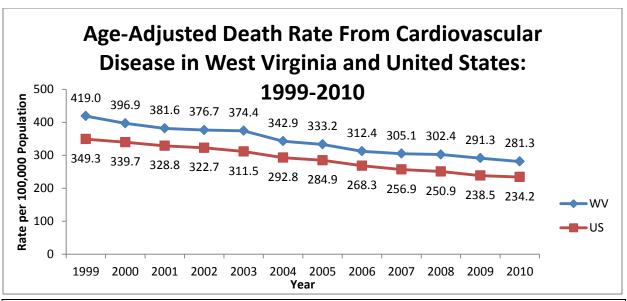
West Virginia had a higher age-adjusted death rate for emphysema than the United States from 1999-2010. Males had a significantly higher death rate than females for 1999, 2002, 2004, 2005, 2010 and combined years 1999-2010 (VSS).



| Ag        | e-Adjusted De | ath Rate per 10 | 0,000 Populati | on From Emph | ysema by Gend        | der   |
|-----------|---------------|-----------------|----------------|--------------|----------------------|-------|
| Year      |               | West Virginia   |                |              | <b>United States</b> |       |
| Tear      | Female        | Male            | Total          | Female       | Male                 | Total |
| 1999      | 3.6           | 6.0             | 4.5            | 5.2          | 8.6                  | 6.5   |
| 2000      | 5.9           | 7.2             | 6.3            | 4.9          | 7.8                  | 6     |
| 2001      | 4.5           | 6.5             | 5.3            | 4.7          | 7.5                  | 5.8   |
| 2002      | 3.8           | 5.8             | 4.6            | 4.4          | 7                    | 5.4   |
| 2003      | 4.4           | 5.3             | 4.6            | 4.3          | 6.4                  | 5.1   |
| 2004      | 3.6           | 7.1             | 5.0            | 3.8          | 5.9                  | 4.6   |
| 2005      | 4.1           | 6.3             | 4.9            | 3.9          | 5.9                  | 4.7   |
| 2006      | 3.9           | 4.8             | 4.2            | 3.5          | 5.1                  | 4.1   |
| 2007      | 4.1           | 4.8             | 4.2            | 3.4          | 5.1                  | 4.1   |
| 2008      | 4.7           | 5.1             | 4.9            | 3.3          | 4.9                  | 3.9   |
| 2009      | 3.4           | 4.9             | 4.0            | 2.8          | 4.1                  | 3.4   |
| 2010      | 2.4           | 5.1             | 3.6            | 2.6          | 3.8                  | 3.1   |
| 1999-2010 | 4.0           | 5.7             | 4.7            | 3.9          | 5.9                  | 4.7   |

Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Apr 24, 2013. ICD-10 codes: J43

The age-adjusted death rate for cardiovascular disease significantly declined between 1999 and 2010. Also, the death rate for females from cardiovascular disease significantly declined between 1999 and 2010. Males had a significantly higher death rate for cardiovascular disease than females for the combined years of 1999-2010 (VSS).



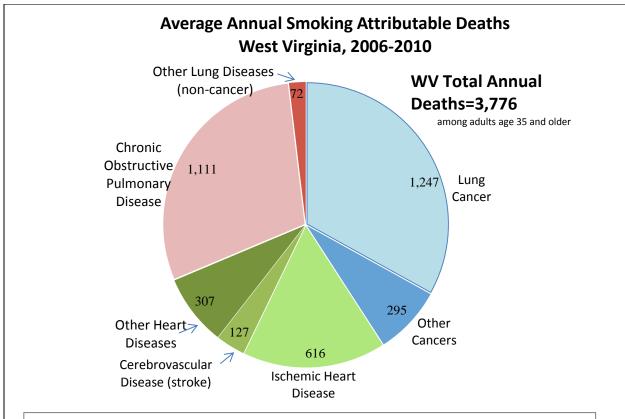
| Age-Adj   | usted Death R | ate per 100,000 | Population Fr | om Cardiovasc | ular Disease by      | Gender |
|-----------|---------------|-----------------|---------------|---------------|----------------------|--------|
| Voor      |               | West Virginia   |               |               | <b>United States</b> |        |
| Year      | Female        | Male            | Total         | Female        | Male                 | Total  |
| 1999      | 362.6         | 494.4           | 419.0         | 296.5         | 419                  | 349.3  |
| 2000      | 336.6         | 478.1           | 396.9         | 288.4         | 407.3                | 339.7  |
| 2001      | 329.4         | 447.4           | 381.6         | 280.8         | 391.2                | 328.8  |
| 2002      | 325.1         | 446.1           | 376.7         | 274.8         | 385.1                | 322.7  |
| 2003      | 324.4         | 436.3           | 374.4         | 265.3         | 371                  | 311.5  |
| 2004      | 298.8         | 400.0           | 342.9         | 249.5         | 348.2                | 292.8  |
| 2005      | 287.4         | 391.2           | 333.2         | 242.7         | 338.9                | 284.9  |
| 2006      | 267.8         | 367.4           | 312.4         | 227.2         | 320.2                | 268.3  |
| 2007      | 261.5         | 355.4           | 305.1         | 217.3         | 306.5                | 256.9  |
| 2008      | 265.3         | 349.0           | 302.4         | 212.4         | 299.1                | 250.9  |
| 2009      | 248.4         | 342.2           | 291.3         | 199.8         | 286.9                | 238.5  |
| 2010      | 241.0         | 330.4           | 281.3         | 196.1         | 282                  | 234.2  |
| 1999-2010 | 295.0         | 400.1           | 341.7         | 244.3         | 342.6                | 287.5  |

Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Apr 24, 2013. ICD-10 codes: IO0-I78

During 2006-2010, annual deaths in West Virginia from cigarette smoking were estimated to be 3,776 among adults 35 and older. This was comprised of about 1,543 cancer deaths; 1,050 heart disease deaths; and 1,183 lung disease deaths. Smoking in WV was the cause of 66% of the cancer deaths, 16% of heart disease deaths, and 66% of lung disease deaths among WV adults age 35 and older. About 19% of all deaths (or nearly 1 in 5 deaths) of WV adults age 35 and older were caused by cigarette smoking. Due to the smoking-related premature deaths

during these years, over 55,000 years of potential life (YPLL) were lost annually. Every smoker who died lost an average of 14.6 years of life lost due to premature death (WVHSC, SAMMEC).

| Cause of Death                 | WV Average Annual Deaths |
|--------------------------------|--------------------------|
| Smoking-Related Cancers        | 1,543                    |
| Smoking-Related Heart Diseases | 1,050                    |
| Smoking-Related Lung Diseases  | 1,183                    |
| Total Smoking-Related Deaths   | 3,776                    |



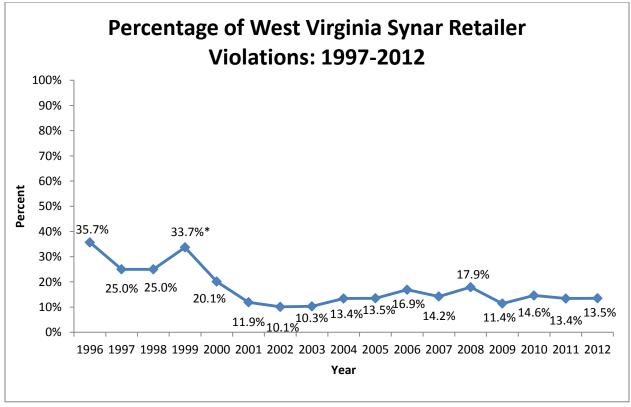
Data Source: WV Health Statistics Center, CDC SAMMEC (Smoking Attributable Mortality, Morbidity and Economic Costs), with data from WV Behavioral Risk Factor Surveillance System, WV Deaths from the Vital Records System, and US Census. Estimates are based on prevalences of current and former cigarette smokers by gender, age 35 and older. See also "Tobacco Is Killing and Costing Us, 2006-2010".

# **Tobacco Risk & Protective Factors**

#### **Access**

<u>Indicator Description</u>: This indicator measures the youth access to tobacco products. <u>Why Indicator is Important</u>: Stricter enforcement of laws, is essential in order to reduce the prevalence of youth using tobacco products. Understanding how youths who smoke access tobacco products can assist prevention efforts.

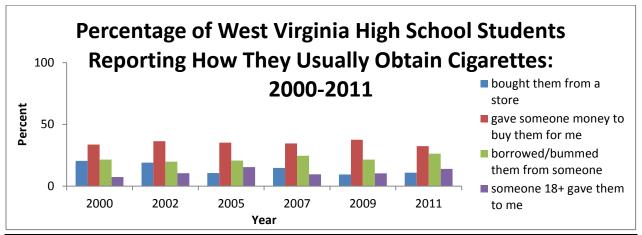
The Synar violation rate for the sales or distribution of tobacco products to individuals under the age of 18 in West Virginia was 13.5% in 2012 (WVBHHF, WVHSC).



Source: WV Bureau for Behavioral Health and Health Facilities and WV Health Statistics Center.

During 2000 to 2011, over 30% of West Virginia's underage current smokers reported obtaining cigarettes by "giving money to someone else to buy them for me," this was significantly higher than any other method. The prevalence of high school underage smokers' purchasing cigarettes from a store seems to be decreasing over time, but this was not a significant decrease. There were no significant changes over time in any method of obtaining cigarettes. Similarly, there were no significant changes occurring over time in any method, or comparing methods for underage males obtaining smokeless tobacco (WVYTS).

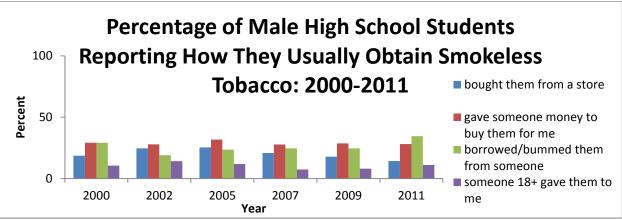
<sup>\*</sup>Note: ABCA Conducted SYNAR in 1999.



| West Virginia High School Students Reporting How They Usually Obtain Cigarettes (Grades 9-12)           |      |      |      |      |      |      |  |  |  |
|---|------|------|------|------|------|------|--|--|--|
| 2000 2002 2005 2007 2009 2011   |      |      |      |      |      |      |  |  |  |
| Bought them from store  | 20.4 | 19.0 | 10.6 | 14.7 | 9.4  | 10.9 |  |  |  |
| Gave someone money to buy them for me   | 33.6 | 36.4 | 35.2 | 34.5 | 37.5 | 32.4 |  |  |  |
| Borrowed/bummed from someone  | 21.5 | 19.8 | 20.7 | 24.6 | 21.4 | 26.3 |  |  |  |
| Someone 18+ gave them to me         7.3         10.4         15.4         9.5         10.3         14.0 |      |      |      |      |      |      |  |  |  |

Source: WV Youth Tobacco Survey

Notes: Among students in grades 9-12 who are current smokers and under 18 years old.



#### Percentage of West Virginia High School Students Reporting How They Usually Obtain Cigarettes (Grades 9-12) 2000 2002 2005 2007 2009 2011 Bought them from store 18.7 25.4\* 20.9\* 17.8 14.4 24.6 Gave someone money to buy them for me 29.2 27.9 27.8\* 28.1 31.8 28.7 Borrowed/bummed from someone 29.2 19.0 23.6\* 24.7\* 24.6 34.6\* Someone 18+ gave them to me 10.5\* 14.2 11.9 7.4 8.1\* 11.1

Source: WV Youth Tobacco Survey

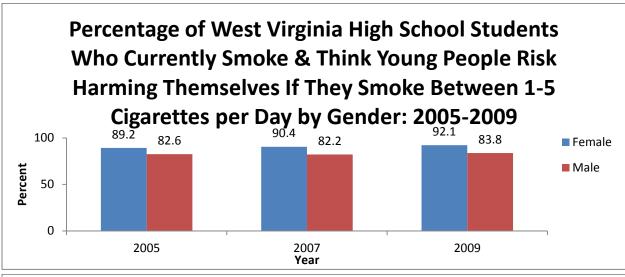
Notes: Among male students in Grades 9-12 who are current smokeless tobacco users and under 18 years old. Tobacco purchases in WV are prohibited to those less than 18 years. Restrictions/regulation of tobacco vending machine sales were enacted in June 2001. \* Estimates may be unreliable (due to n<50, Cl>20, or CV>.30). Use caution in interpreting this data. Vending machine purchase question was not asked for smokeless tobacco. Cigarette vending machine purchase response prevalence's were less than 5% in all these years, and not reliable (due to n<50, Cl>20 or CV>.20), and not presented here. The response options, "I took them from a family member or store", and "obtained in other ways" had low responses and are not presented here.

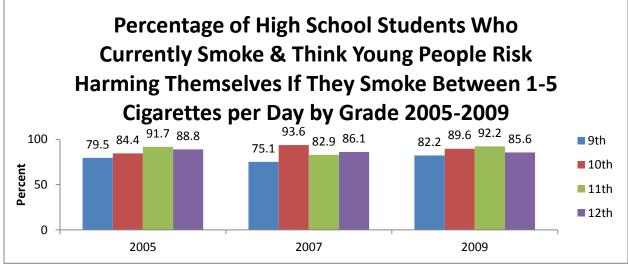
### **Perception of Harm**

**Indicator Description**: The perception of harm from smoking cigarettes.

Why Indicator is Important: The perception of harm from smoking cigarettes can influence one's decision to smoke. In families where parents smoke or are tolerant of children's use, the more likely they are to smoke cigarettes as adolescents. It is important to have a better understanding of how to limit risk factors while strengthening and increasing access to protective resources to reduce cigarette smoking and create healthier individuals and communities. The perception of harm from smoking cigarettes is associated with cigarette use and understanding this can be used in prevention interventions.

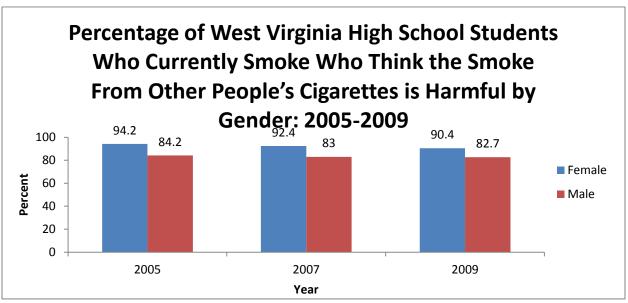
Male high school students in West Virginia who currently smoke had a lower perception of harm from smoking cigarettes (83.8%) compared to females (92.1%) in 2009. Also, students in the 9<sup>th</sup> grade who were current smokers (smoking at least one cigarette in the last 30 days) had the lowest perception of harm from smoking cigarettes compared to 10<sup>th</sup> through 12<sup>th</sup> grade students (WVYTS).





| Percentage of West Virginia High School Students Who Currently Smoke & Think Young People Risk Harming Themselves If They Smoke Between 1-5 Cigarettes per Day by Gender and Grade: |                   |                                 |      |                 |                  |                  |                  |  |  |
|---|-------------------|---------------------------------|------|-----------------|------------------|------------------|------------------|--|--|
|   |                   |                                 | 2005 | -2009           |                  |                  |                  |  |  |
|   | Total             | Female                          | Male | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |
| 2005  | 85.8              | 89.2                            | 82.6 | 79.5            | 84.4             | 91.7             | 88.8             |  |  |
| 2007  | 84.6              | 90.4                            | 82.2 | 75.1            | 93.6             | 82.9             | 86.1             |  |  |
| 2009  | 87.7              | 92.1                            | 83.8 | 82.2            | 89.6             | 92.2             | 85.6             |  |  |
| Source: WV You  | th Tobacco Survey | Source: WV Youth Tobacco Survey |      |                 |                  |                  |                  |  |  |

Female high school students in West Virginia who currently smoke had a higher prevalence of thinking that smoke from other people's cigarettes is harmful than males from 2005-2009 (WVYTS).



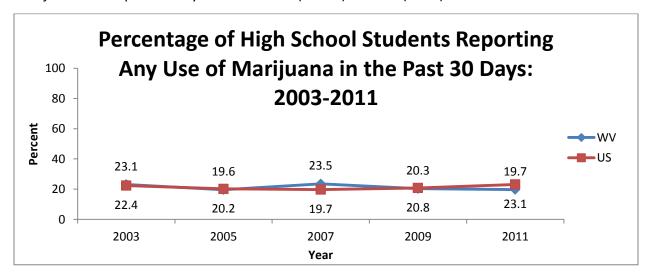
| Percentage of West Virginia High School Students Who Currently Smoke Who Think the Smoke From Other People's Cigarettes is Harmful by Gender and Grade: 2005-2009 |  |      |      |      |      |      |      |  |  |
|---|--|------|------|------|------|------|------|--|--|
|   | Total Female Male 9 <sup>th</sup> 10 <sup>th</sup> 11 <sup>th</sup> 12 <sup>th</sup> |      |      |      |      |      |      |  |  |
| 2005  | 89.1   | 94.2 | 84.2 | 88.2 | 88.9 | 90.8 | 89.2 |  |  |
| 2007  | 86.3   | 92.4 | 83   | 80.5 | 89.2 | 86.8 | 88.1 |  |  |
| 2009  | 86.3   | 90.4 | 82.7 | 89.9 | 84.5 | 86.2 | 85.9 |  |  |
| Source: WV You  | Source: WV Youth Tobacco Survey  |      |      |      |      |      |      |  |  |

# **Drug Consumption**

#### **Current Use**

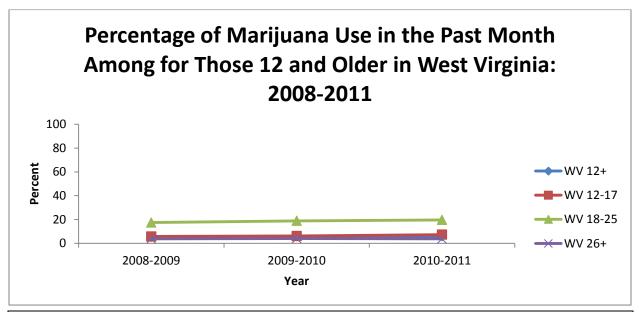
<u>Indicator Description</u>: Current use is the consumption of drugs within the last 30 days. <u>Why Indicator is Important</u>: Drug use is a major public health issue in West Virginia and in the nation. According to the Mayo Clinic, dependence on drugs can lead to health problems, unconsciousness, coma, sudden death, transmission of communicable disease, accidents, suicide, social issues (family, work, and school), legal issues, and financial problems. This indicator provides a better understanding of the burden of drug use in West Virginia.

In 2011 high school students in the 12<sup>th</sup> grade in West Virginia were significantly more likely to have reported using marijuana in past the 30 days than 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> grade students. Male high school students (24.2%) in West Virginia were significantly more likely to have used marijuana in the past 30 days than females (15.1%) in 2011 (YRBS).



#### Percentage of High School Students Reporting Any Use of Marijuana in the Past 30 Days by Gender and Grade: 2003-2011 **West Virginia** Gender Grade Total 9<sup>th</sup> 11<sup>th</sup> 10<sup>th</sup> 12<sup>th</sup> Female Year Male 2003 23.1 23.6 22.7 15.7 23.3 25.8 30.0 2005 19.6 22.7 16.4 19.1 21.1 21.5 18.1 2007 23.5 25.4 21.4 20.1 23.1 26.3 25.6 2009 20.3 22.7 17.6 14.4 19.0 20.1 28.4 2011 19.7 24.2 15.1 16.8 17.6 19.9 25.8 **United States** Gender Grade Total 10<sup>th</sup> 9<sup>th</sup> 11<sup>th</sup> 12<sup>th</sup> Male Year Female 2003 22.4 25.1 19.3 18.5 22.0 24.1 25.8 2005 20.2 22.1 18.2 17.4 20.2 21.0 22.8 14.7 2007 19.7 22.4 17.0 19.3 21.4 25.1 2009 20.8 23.4 17.9 15.5 21.1 23.2 24.6 2011 23.1 25.9 20.1 18.0 21.6 25.5 28.0 Source: YRBS

The highest prevalence of current marijuana use was among those aged 18-24 in both West Virginia and in the United States from 2008-2011 compared to those aged 12-17 and 26 and older (NSDUH).

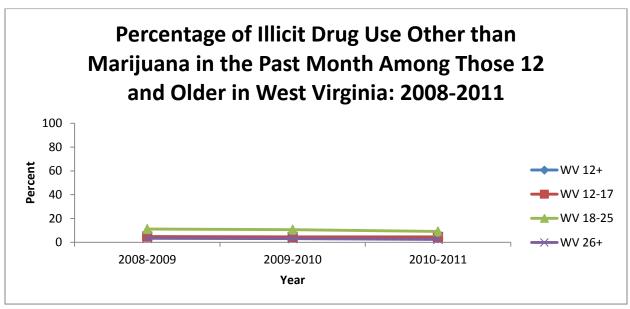


| Percentage of Marijuana Use in the Past Month Among Those 12 and Older |           |   |      |               |      |      |  |  |
|--|-----------|---|------|---------------|------|------|--|--|
|  |           | West Virginia   |      | United States |      |      |  |  |
| Ages   | 2008-2009 | 2008-2009 2009-2010 2010-2011 2008-2009 2009-2010 201 |      |               |      |      |  |  |
| 12-17  | 5.7       | 6.1   | 7.3  | 7.0           | 7.4  | 7.6  |  |  |
| 18-25  | 17.5      | 18.9  | 19.7 | 17.4          | 18.4 | 18.8 |  |  |
| 26 and older   | 3.7       | 4.0   | 3.7  | 4.4           | 4.7  | 4.8  |  |  |
| 12 & older   | 5.5       | 6.0   | 6.0  | 6.4           | 6.8  | 6.9  |  |  |

Source: NSDUH

Note: 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

The highest prevalence of current illicit drug use other than marijuana was among those aged 18-24 in West Virginia and in the United States from 2008-2011 compared to those aged 12-17 and 26 and older (NSDUH).

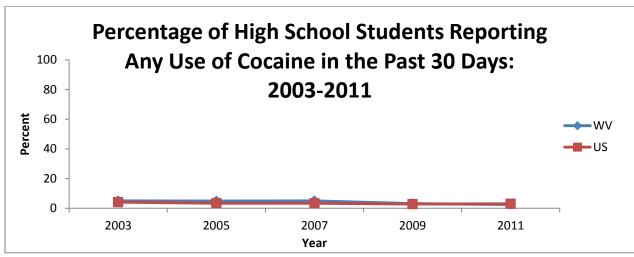


| Percentage of Illicit Drug Use Other than Marijuana in the Past Month Among Those 12 and Older |                         |  |     |               |     |     |  |  |
|--|-------------------------|--|-----|---------------|-----|-----|--|--|
|  |                         | West Virginia  |     | United States |     |     |  |  |
| Ages   | 2008-2009               | 2008-2009 2009-2010 2010-2011 2008-2009 2009-2010 2010-2 |     |               |     |     |  |  |
| 12-17  | 4.9                     | 4.6  | 4.6 | 4.5           | 4.5 | 4.3 |  |  |
| 18-25  | 11.2                    | 10.6   | 9.1 | 8.1           | 8.2 | 7.5 |  |  |
| 26 and older   | 3.4                     | 3.2  | 2.5 | 2.6           | 2.7 | 2.5 |  |  |
| 12 and older   | 4.4 4.2 3.5 3.5 3.6 3.3 |  |     |               |     |     |  |  |

Source: NSDUH

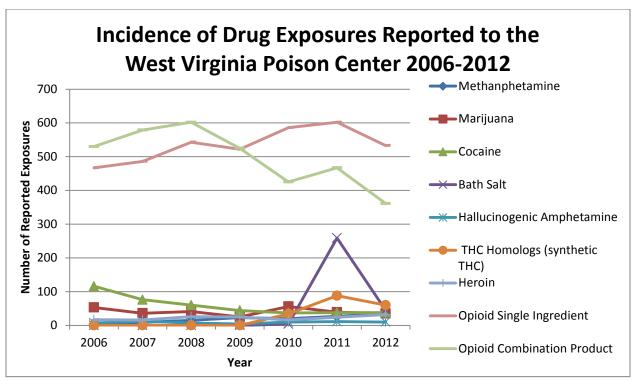
Note: Illicit Drugs Other Than Marijuana includes cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically, including data from original methamphetamine questions but not including new methamphetamine items added in 2005 and 2006. The 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

Male high school students (3.8%) in West Virginia reported a significantly higher percentage of use of cocaine in the last 30 days than female high school students (1.2%) in 2011 (YRBS).



|               | Year   |      |        |                 |                  |                  |                  |  |  |  |  |
|---------------|--|------|--------|-----------------|------------------|------------------|------------------|--|--|--|--|
| Percentage    | Percentage of High School Students Reporting Any Use of Cocaine in the Past 30 Days by Gender and Grade: 2003-2011 |      |        |                 |                  |                  |                  |  |  |  |  |
| West Virginia |  |      |        |                 |                  |                  |                  |  |  |  |  |
|               | Gender Grade   |      |        |                 |                  |                  |                  |  |  |  |  |
| Year          | Total  | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |  |
| 2003          | 5.0  | 4.7  | 5.4    | 5.7             | 3.3              | 3.9              | 6.6              |  |  |  |  |
| 2005          | 4.9  | 5.7  | 4.2    | 6.4             | 5.1              | 3.8              | 4.1              |  |  |  |  |
| 2007          | 5.0  | 4.6  | 5.3    | 3.7             | 5.1              | 5.9              | 5.5              |  |  |  |  |
| 2009          | 3.1  | 3.6  | 2.2    | 2.4             | 3.3              | 2.8              | 3.8              |  |  |  |  |
| 2011          | 2.5  | 3.8  | 1.2    | 2.8             | 1.5              | 2.6              | 3.5              |  |  |  |  |
|               |  |      | United | States          |                  |                  |                  |  |  |  |  |
|               | Total  | Ge   | nder   |                 | Gra              | ade              |                  |  |  |  |  |
| Year          | Total  | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |  |
| 2003          | 4.1  | 4.6  | 3.5    | 3.6             | 3.7              | 4.1              | 4.7              |  |  |  |  |
| 2005          | 3.4  | 4.0  | 2.8    | 3.0             | 3.1              | 3.6              | 3.8              |  |  |  |  |
| 2007          | 3.3  | 4.0  | 2.5    | 2.7             | 3.2              | 2.9              | 4.4              |  |  |  |  |
| 2009          | 2.8  | 3.5  | 2.0    | 2.3             | 2.5              | 3.3              | 3.0              |  |  |  |  |
| 2011          | 3.0  | 4.1  | 1.8    | 2.8             | 3.0              | 3.0              | 3.0              |  |  |  |  |
| Source: YRBS  |  |      |        |                 |                  |                  |                  |  |  |  |  |

In 2010, single ingredient opioid became the leading drug exposure reported to the West Virginia Poison Center. In 2011 there was a spike in reports of bath salt exposures. Heroin exposures are rising in 2013, there were already 42 incidences reported in early September 2013 (there were 32 reported exposures for heroin in 2012).



| Incidence of Methamphetamine Exposures Reported to the West Virginia Poison Center 2006-2012 |          |         |          |          |         |         |      |  |  |  |
|--|----------|---------|----------|----------|---------|---------|------|--|--|--|
|  | 2006     | 2007    | 2008     | 2009     | 2010    | 2011    | 2012 |  |  |  |
| Methamphetamine Exposures  | 4        | 9       | 15       | 23       | 20      | 27      | 35   |  |  |  |
| <= 5 Years   | 0        | 0       | 1        | 4        | 1       | 5       | 6    |  |  |  |
| 6-12 Years   | 1        | 0       | 1        | 1        | 0       | 5       | 2    |  |  |  |
| 13-19 Years  | 0        | 0       | 1        | 1        | 3       | 4       | 5    |  |  |  |
| >=20 Years   | 3        | 8       | 11       | 15       | 14      | 13      | 21   |  |  |  |
| Seen in a Healthcare Facility  | 4        | 9       | 11       | 18       | 18      | 25      | 31   |  |  |  |
| Minor Effect   | 1        | 2       | 2        | 2        | 4       | 4       | 5    |  |  |  |
| Moderate Effect  | 0        | 5       | 3        | 5        | 6       | 7       | 7    |  |  |  |
| Major Effect   | 0        | 0       | 3        | 1        | 0       | 0       | 0    |  |  |  |
| Death  | 0        | 0       | 0        | 0        | 0       | 0       | 0    |  |  |  |
| Incidence of Marijuana Exposures Reported  | d to the | West Vi | rginia P | oison Ce | nter 20 | 06-2012 |      |  |  |  |
|  | 2006     | 2007    | 2008     | 2009     | 2010    | 2011    | 2012 |  |  |  |
| Marijuana Exposures  | 53       | 36      | 41       | 25       | 56      | 39      | 35   |  |  |  |
| <= 5 Years   | 1        | 1       | 1        | 0        | 2       | 0       | 0    |  |  |  |
| 6-12 Years   | 2        | 0       | 0        | 0        | 0       | 0       | 0    |  |  |  |
| 13-19 Years  | 15       | 14      | 12       | 13       | 17      | 14      | 11   |  |  |  |
| >=20 Years   | 34       | 21      | 28       | 12       | 37      | 25      | 24   |  |  |  |
| Seen in a Healthcare Facility  | 43       | 32      | 40       | 19       | 50      | 37      | 33   |  |  |  |
| Minor Effect   | 18       | 16      | 17       | 12       | 23      | 12      | 15   |  |  |  |
| Moderate Effect  | 20       | 8       | 11       | 3        | 18      | 18      | 14   |  |  |  |

| Naiox Effort                                |            | ۱ ،      | T 0       | ٦        | 1         |          | 1     |
|---|------------|----------|-----------|----------|-----------|----------|-------|
| Major Effect Death                          | 2          | 3        | 0         | 0        | 0         | 0        | 0     |
| Death                                       |            | 0        | 0         | l 0      | 1 0       | 1 0      |       |
| Incidence of Cocaine Exposures Reporte      | d to the V | Vest Vir | ginia Po  | ison Cer | nter 200  | 6-2012   |       |
|   | 2006       | 2007     | 2008      | 2009     | 2010      | 2011     | 2012  |
| Cocaine Exposures                           | 116        | 76       | 60        | 44       | 37        | 38       | 38    |
| <= 5 Years                                  | 1          | 0        | 3         | 1        | 1         | 1        | 0     |
| 6-12 Years                                  | 0          | 0        | 0         | 0        | 0         | 0        | 0     |
| 13-19 Years                                 | 8          | 5        | 5         | 3        | 0         | 1        | 0     |
| >=20 Years                                  | 107        | 71       | 51        | 40       | 35        | 36       | 38    |
| Seen in a Healthcare Facility               | 106        | 71       | 55        | 41       | 33        | 34       | 35    |
| Minor Effect                                | 29         | 21       | 17        | 21       | 8         | 11       | 13    |
| Moderate Effect                             | 49         | 34       | 18        | 12       | 13        | 15       | 17    |
| Major Effect                                | 13         | 4        | 5         | 2        | 1         | 3        | 1     |
| Death                                       | 2          | 2        | 1         | 2        | 1         | 0        | 0     |
| Incidence of Bath Salt Exposures Reporte    | ed to the  | Most Vii | rginia Dr | ison Co  | nter 200  | 16-2012  |       |
| incluence of Bath Sait Exposures Report     | 2006       | 2007     | 2008      | 2009     | 2010      | 2011     | 2012  |
| Bath Salt Exposures                         | 0          | 0        | 0         | 0        | 4         | 259      | 45    |
| <= 5 Years                                  | 0          | 0        | 0         | 0        | 0         | 0        | 0     |
| 6-12 Years                                  | 0          | 0        | 0         | 0        | 0         | 0        | 0     |
| 13-19 Years                                 | 0          | 0        | 0         | 0        | 1         | 26       | 9     |
| >=20 Years                                  | 0          | 0        | 0         | 0        | 3         | 231      | 36    |
| Seen in a Healthcare Facility               | 0          | 0        | 0         | 0        | 3         | 226      | 40    |
| Minor Effect                                | 0          | 0        | 0         | 0        | 1         | 33       | 8     |
| Moderate Effect                             | 0          | 0        | 0         | 0        | 2         | 147      | 25    |
| Major Effect                                | 0          | 0        | 0         | 0        | 0         | 8        | 5     |
| Death                                       | 0          | 0        | 0         | 0        | 0         | 1        | 0     |
|   |            |          |           |          |           | L        |       |
| Incidence of Hallucinogenic Amphetamine Ex  | -          | eported  | l to the  | West Vi  | rginia Po | oison Ce | nter  |
| 2   | 006-2012   | T        |           |          |           |          | T     |
|   | 2006       | 2007     | 2008      | 2009     | 2010      | 2011     | 2012  |
| Hallucinogenic Amphetamine Exposures        | 7          | 12       | 7         | 4        | 10        | 11       | 10    |
| <= 5 Years                                  | 0          | 0        | 0         | 0        | 0         | 0        | 0     |
| 6-12 Years                                  | 1          | 0        | 0         | 0        | 0         | 0        | 0     |
| 13-19 Years                                 | 3          | 4        | 0         | 2        | 3         | 6        | 3     |
| >=20 Years                                  | 3          | 7        | 7         | 2        | 7         | 5        | 7     |
| Seen in a Healthcare Facility               | 6          | 11       | 7         | 4        | 8         | 9        | 7     |
| Minor Effect                                | 1          | 2        | 1         | 1        | 2         | 4        | 0     |
| Moderate Effect                             | 4          | 4        | 2         | 3        | 4         | 3        | 5     |
| Major Effect                                | 0          | 1        | 1         | 0        | 1         | 1        | 0     |
| Death                                       | 0          | 1        | 0         | 0        | 0         | 0        | 0     |
| Incidence of THC Homologs (synthetic THC) E | xposures   | Reporte  | d to the  | West V   | irginia P | oison Ce | enter |
|   | 006-2012   | -        |           |          |           |          |       |
|   | 2006       | 2007     | 2008      | 2009     | 2010      | 2011     | 2012  |
| THC Homologs (synthetic THC) Exposures      | 0          | 0        | 0         | 0        | 34        | 88       | 60    |
| <= 5 Years                                  | 0          | 0        | 0         | 0        | 0         | 0        | 1     |
| 6-12 Years                                  | 0          | 0        | 0         | 0        | 0         | 1        | 1     |
| 13-19 Years                                 | 0          | 0        | 0         | 0        | 18        | 40       | 18    |
|   |            |          |           |          |           |          |       |

| >=20 Years                    | 0 | 0 | 0 | 0 | 16 | 46 | 39 |
|-------------------------------|---|---|---|---|----|----|----|
| Seen in a Healthcare Facility | 0 | 0 | 0 | 0 | 27 | 86 | 59 |
| Minor Effect                  | 0 | 0 | 0 | 0 | 12 | 30 | 18 |
| Moderate Effect               | 0 | 0 | 0 | 0 | 12 | 49 | 26 |
| Major Effect                  | 0 | 0 | 0 | 0 | 0  | 0  | 1  |
| Death                         | 0 | 0 | 0 | 0 | 0  | 0  | 0  |

| Incidence of Heroin Exposures Reported to the West Virginia Poison Cente |
|--|
|--|

|                               | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------------------------|------|------|------|------|------|------|------|
| Heroin Exposures*             | 17   | 16   | 26   | 25   | 16   | 24   | 32   |
| <= 5 Years                    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 6-12 Years                    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 13-19 Years                   | 3    | 2    | 3    | 2    | 0    | 0    | 3    |
| >=20 Years                    | 14   | 14   | 23   | 23   | 16   | 24   | 29   |
| Seen in a Healthcare Facility | 16   | 16   | 25   | 23   | 16   | 22   | 32   |
| Minor Effect                  | 5    | 6    | 10   | 6    | 3    | 4    | 7    |
| Moderate Effect               | 4    | 2    | 5    | 8    | 5    | 12   | 13   |
| Major Effect                  | 4    | 2    | 3    | 3    | 1    | 3    | 7    |
| Death                         | 1    | 0    | 0    | 1    | 1    | 0    | 0    |

### Incidence of Opioid Single Ingredient Exposures Reported to the West Virginia Poison Center 2006-2012

|                                      | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------------|------|------|------|------|------|------|------|
| Opioid Single Ingredient Exposures** | 467  | 486  | 543  | 522  | 586  | 602  | 533  |
| <= 5 Years                           | 41   | 46   | 65   | 68   | 63   | 65   | 64   |
| 6-19 Years                           | 36   | 58   | 62   | 50   | 40   | 51   | 36   |
| >=20 Years                           | 385  | 374  | 408  | 402  | 479  | 485  | 432  |
| Seen in a Healthcare Facility        | 363  | 395  | 460  | 444  | 474  | 509  | 442  |
| Minor Effect                         | 101  | 112  | 144  | 153  | 176  | 158  | 162  |
| Moderate Effect                      | 152  | 108  | 123  | 102  | 154  | 199  | 158  |
| Major Effect                         | 47   | 40   | 31   | 41   | 44   | 30   | 41   |
| Death                                | 7    | 6    | 20   | 11   | 4    | 7    | 6    |

# Incidence of Opioid Combination Product Exposures Reported to the West Virginia Poison Center 2006-2012

|   | 00-2012 |      |      |      |      |      |      |
|---|---------|------|------|------|------|------|------|
|   | 2006    | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| Opioid Combination Product Exposures*** | 530     | 579  | 602  | 525  | 425  | 467  | 361  |
| <= 5 Years                              | 37      | 60   | 59   | 47   | 26   | 10   | 25   |
| 6-19 Years                              | 57      | 78   | 75   | 70   | 41   | 36   | 28   |
| >=20 Years                              | 439     | 436  | 458  | 404  | 358  | 403  | 307  |
| Seen in a Healthcare Facility           | 402     | 458  | 463  | 437  | 332  | 381  | 307  |
| Minor Effect                            | 169     | 165  | 182  | 183  | 133  | 146  | 127  |
| Moderate Effect                         | 120     | 137  | 90   | 94   | 97   | 134  | 99   |
| Major Effect                            | 18      | 24   | 28   | 32   | 23   | 16   | 14   |
| Death                                   | 2       | 2    | 10   | 4    | 5    | 6    | 1    |

Source: West Virginia Poison Center

Note: Exposures are limited to only those that are directly reported to WV Poison Center. Values displayed are based on intake and follow up of the WV Poison Center staff; not all subcategories are reported for every exposure.

<sup>\*</sup>Already have 24 incidences of heroin exposures reported by mid-April 2013.

<sup>\*\*</sup>Opioid is the only drug in the drug product.

<sup>\*\*\*</sup> includes hydrocodone as all hydrocodone products are combination products (e.g., Lortab, Vicodin); includes oxycodone combination products (e.g., Percocet, Percodan): all other combination opiate products excluding cough/cold products (usually liquids)

The West Virginia Prescription Drug Abuse Quitline received 302 reports of prescription abuse in 2012. The top five drugs reported to the Quitline are listed in the table below. The leading prescription drug was oxycodone (31.8%).

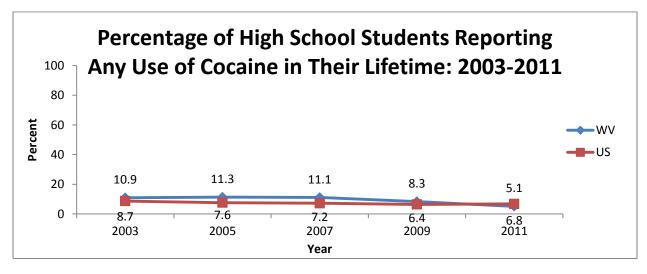
| Top Five Primary Substance Prescription Drugs Reported to the West Virginia Prescription Drug Abuse Quitline in 2012 |   |  |       |    |  |  |  |  |  |  |  |
|--|---|--|-------|----|--|--|--|--|--|--|--|
| Drug Name  | Drug Class  | Total % Reported # c Drugs Used Call           |       |    |  |  |  |  |  |  |  |
| Oxycodone  | Opioid  | Oxycontin, Tylox, Percodan, Percocet, Combunox | 31.8% | 96 |  |  |  |  |  |  |  |
| Hydrocodone  | done Opioid Loret, Lortab, Norco, Vicoprofen, Vicodin |  | 13.6% | 41 |  |  |  |  |  |  |  |
| Other / Anything Available   | Opioid  | Other  | 11.9% | 36 |  |  |  |  |  |  |  |
| Oxymorphone  | Opioid  | Opana  | 6.3%  | 19 |  |  |  |  |  |  |  |
| Alprazolam   | Benzodiazepine  | Xanax  | 4.3%  | 13 |  |  |  |  |  |  |  |
| Source: West Virginia Pres   | scription Drug Abuse Quit                             | line   |       |    |  |  |  |  |  |  |  |

### Lifetime Use

<u>Indicator Description</u>: This indicator describes the lifetime drug consumption of youths as well as examines the sales of prescription drugs in the state for all ages.

<u>Why Indicator is Important</u>: This indicator examines a variety of lifetime drug consumption: cocaine, inhalants, heroin, methamphetamine, ecstasy, steroid, prescription drug, drug injections, and pain relievers. Analysis of lifetime use assists in the assessment of which drugs are a burden in West Virginia. This information is especially important for prevention efforts to reduce the impacts of drugs in society.

West Virginia had a significantly lower rate of lifetime use of cocaine (5.1%) among high school students compared to the nation (6.8%) in 2011. However, in 2005-2009 West Virginia high school students had a significantly higher rate of lifetime use of cocaine among high school students compared to the nation. Male high school students (7%) in West Virginia reported a significantly higher percentage of lifetime use of cocaine than female high school students (3.1%) in 2011. Students in the 12<sup>th</sup> grade were significantly more likely to have reported lifetime use of cocaine than students in the 9<sup>th</sup> and 10<sup>th</sup> grades in West Virginia (YRBS).



# Percentage of High School Students Reporting Any Use of Cocaine in Their Lifetime by Gender and Grade: 2003-2011

| West Virg | zin | ia |
|-----------|-----|----|
|-----------|-----|----|

|      | Total | Ger  | nder   | Grade           |                  |                  |                  |  |  |
|------|-------|------|--------|-----------------|------------------|------------------|------------------|--|--|
| Year | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |
| 2003 | 10.9  | 9.8  | 12.1   | 10.1            | 9.2              | 9.9              | 14.3             |  |  |
| 2005 | 11.3  | 11.5 | 10.8   | 11.4            | 10.3             | 10.9             | 13.5             |  |  |
| 2007 | 11.1  | 11.8 | 10.2   | 7.1             | 10.3             | 13.3             | 15.1             |  |  |
| 2009 | 8.3   | 9.2  | 7.0    | 7.0             | 5.8              | 8.5              | 12.5             |  |  |
| 2011 | 5.1   | 7.0  | 3.1    | 4.0             | 3.7              | 5.4              | 7.8              |  |  |

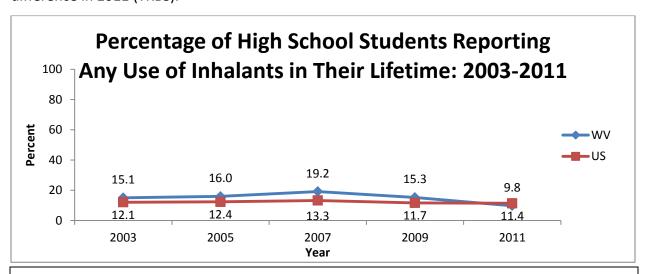
### **United States**

|      | Total | Ger  | nder   |                 | Grade            |                  |                  |  |  |  |
|------|-------|------|--------|-----------------|------------------|------------------|------------------|--|--|--|
| Year | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |
| 2003 | 8.7   | 9.5  | 7.7    | 6.8             | 8.5              | 9.0              | 10.5             |  |  |  |
| 2005 | 7.6   | 8.4  | 6.8    | 6.0             | 7.2              | 8.7              | 8.9              |  |  |  |
| 2007 | 7.2   | 7.8  | 6.5    | 4.8             | 7.2              | 7.7              | 9.5              |  |  |  |
| 2009 | 6.4   | 7.3  | 5.3    | 4.5             | 5.6              | 7.7              | 7.9              |  |  |  |
| 2011 | 6.8   | 7.9  | 5.7    | 5.0             | 6.5              | 7.5              | 8.5              |  |  |  |

Source: YRBS

Note: Cocaine includes: cocaine powder, crack, or freebase.

High school students in West Virginia reported a significantly higher rate of use of inhalants in their lifetime from 2005-2009 compared to the United States. There was no significant difference in 2011 (YRBS).



# Percentage of High School Students Reporting Any Use of Inhalants in Their Lifetime by Gender and Grade: 2003-2011

|      |       |      | West \ | /irginia        |                  |      |                  |  |
|------|-------|------|--------|-----------------|------------------|------|------------------|--|
|      | Takal | Ger  | nder   | Grade           |                  |      |                  |  |
| Year | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11th | 12 <sup>th</sup> |  |
| 2003 | 15.1  | 15.1 | 15.2   | 16.1            | 16.1             | 13.7 | 12.3             |  |
| 2005 | 16.0  | 14.5 | 17.5   | 21.1            | 16.5             | 14.6 | 10.8             |  |
| 2007 | 19.2  | 16.2 | 22.0   | 19.9            | 17.9             | 19.5 | 19.4             |  |
| 2009 | 15.3  | 13.7 | 16.2   | 13.7            | 16.5             | 15.1 | 15.1             |  |
| 2011 | 9.8   | 10.2 | 9.3    | 11.0            | 8.7              | 7.9  | 11.5             |  |

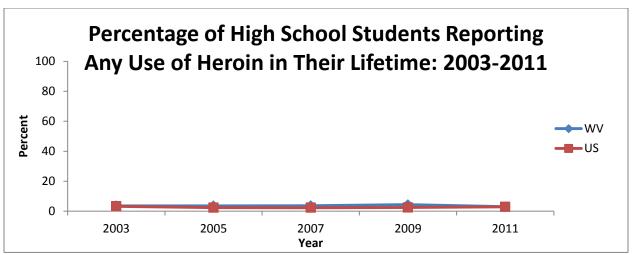
### **United States**

|      | Total |      | Gender |                 | Grade            |                  |      |  |  |
|------|-------|------|--------|-----------------|------------------|------------------|------|--|--|
| Year | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12th |  |  |
| 2003 | 12.1  | 12.6 | 11.4   | 13.6            | 11.1             | 11.0             | 11.8 |  |  |
| 2005 | 12.4  | 11.3 | 13.5   | 14.1            | 13.2             | 11.4             | 10.1 |  |  |
| 2007 | 13.3  | 12.4 | 14.3   | 15.0            | 14.6             | 12.5             | 10.2 |  |  |
| 2009 | 11.7  | 10.6 | 12.9   | 13.0            | 12.5             | 11.5             | 9.1  |  |  |
| 2011 | 11.4  | 10.5 | 12.3   | 12.7            | 11.8             | 11.1             | 9.3  |  |  |

Source: YRBS

Notes: Inhalants include: sniffing glue, breathing the contents of aerosol spray cans, or inhaling any paint sprays

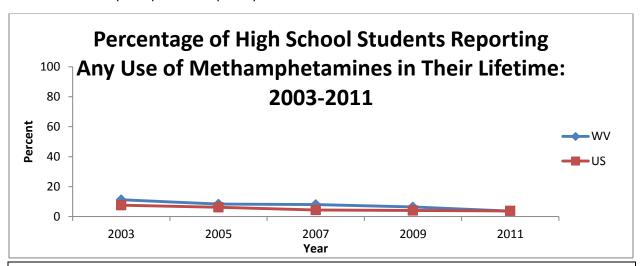
High school students in West Virginia reported a significantly higher rate of lifetime use of heroin compared to the national rate from 2005-2009. There was no significant difference in 2011. Male high school students (4.3%) in West Virginia reported a significantly higher percentage of use of heroin in their lifetime than females (1.6%) in 2011 (YRBS).



|      |       |      | Grade: 20 | 03-2011         |                  | -                |                  |
|------|-------|------|-----------|-----------------|------------------|------------------|------------------|
|      |       |      | West V    | irginia         |                  |                  |                  |
|      | Total | Ge   | nder      |                 |                  | ade              |                  |
| Year | TOtal | Male | Female    | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003 | 3.6   | 4.2  | 3.0       | 3.9             | 3.7              | 0.7              | 4.7              |
| 2005 | 3.6   | 4.8  | 2.4       | 3.8             | 4.2              | 2.6              | 4.2              |
| 2007 | 3.7   | 4.7  | 2.5       | 3.0             | 2.9              | 4.7              | 4.5              |
| 2009 | 4.4   | 4.8  | 3.2       | 2.6             | 3.6              | 4.8              | 6.3              |
| 2011 | 3.0   | 4.3  | 1.6       | 2.5             | 1.3              | 4.3              | 4.0              |
|      |       | •    | United    | States          |                  |                  |                  |
|      | Takal | Ge   | nder      |                 | Gra              | ade              |                  |
| Year | Total | Male | Female    | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003 | 3.3   | 4.3  | 2.0       | 3.5             | 2.9              | 3.0              | 2.9              |
| 2005 | 2.4   | 3.3  | 1.4       | 2.8             | 2.5              | 1.8              | 2.0              |
| 2007 | 2.3   | 2.9  | 1.6       | 2.6             | 1.8              | 1.8              | 2.6              |
| 2009 | 2.5   | 3.2  | 1.7       | 2.1             | 2.2              | 3.2              | 2.5              |
| 2011 | 2.9   | 3.9  | 1.8       | 2.9             | 2.8              | 2.8              | 2.7              |

Notes: Heroin is also called "smack", "junk", or "China white".

High school students in West Virginia had a significantly higher reported use of methamphetamines in their lifetime than the nation from 2003 to 2009, however there was no significant difference in 2011. Male high school students (5%) in West Virginia reported a significantly higher percentage of using methamphetamines in their lifetime than female high school students (2.3%) in 2011 (YRBS).



Percentage of High School Students Reporting Any Use of Methamphetamines in Their Lifetime by Gender and Grade: 2003-2011

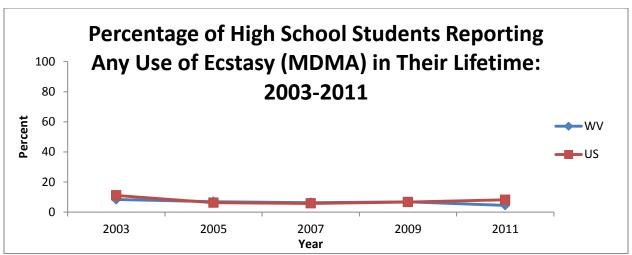
|      | West Virginia |        |        |                 |                  |                  |                  |  |  |  |
|------|---------------|--------|--------|-----------------|------------------|------------------|------------------|--|--|--|
|      | <b>-</b>      | Gender |        | Grade           |                  |                  |                  |  |  |  |
| Year | Total         | Male   | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |
| 2003 | 11.3          | 11.4   | 11.2   | 10.1            | 12.8             | 11.4             | 10.9             |  |  |  |
| 2005 | 8.4           | 7.6    | 9.2    | 9.8             | 8.4              | 9.3              | 6.0              |  |  |  |
| 2007 | 8.1           | 7.8    | 8.3    | 5.6             | 7.7              | 9.2              | 10.2             |  |  |  |
| 2009 | 6.5           | 6.9    | 5.5    | 4.0             | 7.4              | 7.1              | 7.9              |  |  |  |
| 2011 | 3.7           | 5.0    | 2.3    | 2.7             | 3.5              | 3.8              | 5.1              |  |  |  |

|      |       |        | United | States          |                  |                  |                  |  |
|------|-------|--------|--------|-----------------|------------------|------------------|------------------|--|
|      | Total | Gender |        | Grade           |                  |                  |                  |  |
| Year | Total | Male   | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |
| 2003 | 7.6   | 8.3    | 6.8    | 6.7             | 7.5              | 8.0              | 8.0              |  |
| 2005 | 6.2   | 6.3    | 6.0    | 5.7             | 5.9              | 6.7              | 6.4              |  |
| 2007 | 4.4   | 4.6    | 4.1    | 3.6             | 4.1              | 5.4              | 4.5              |  |
| 2009 | 4.1   | 4.7    | 3.3    | 3.3             | 3.7              | 5.2              | 4.1              |  |
| 2011 | 3.8   | 4.5    | 3.0    | 3.2             | 3.7              | 4.1              | 4.1              |  |

Source: YRBS

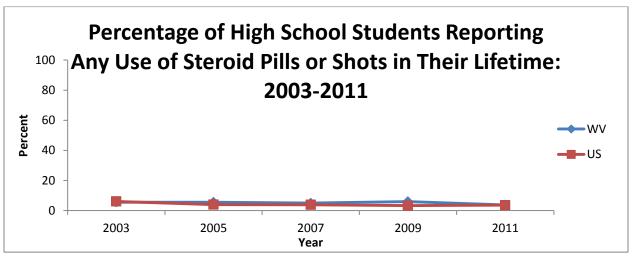
Notes: Methamphetamine is also called "speed", "crystal", "crank", or "ice".

High school students (4.5%) in West Virginia reported a significantly lower percentage of using ecstasy in their lifetime compared to those in the United States (8.2%) in 2011. Male high school students (6.1%) in West Virginia reported a significantly higher percentage of using ecstasy in their lifetime than female high school students (2.8%) in 2011 (YRBS).



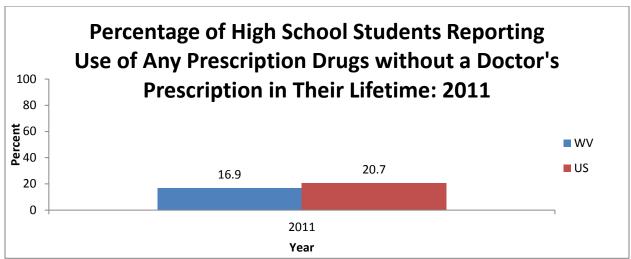
| Percenta          | ge of High S     |      | ts Reporting A | -               | • •              | A) in Their Lif  | etime by         |
|-------------------|------------------|------|----------------|-----------------|------------------|------------------|------------------|
|                   |                  | G    | ender and Gra  |                 | 11               |                  |                  |
|                   |                  |      | West V         | 'irginia        |                  |                  |                  |
|                   | Total            | Ge   | nder           |                 |                  | ade              |                  |
| Year              | Total            | Male | Female         | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003              | 8.4              | 8.0  | 8.7            | 4.4             | 7.1              | 6.1              | 16.5             |
| 2005              | 6.9              | 8.2  | 5.6            | 8.3             | 5.5              | 7.8              | 6.6              |
| 2007              | 6.3              | 7.5  | 4.9            | 3.9             | 6.4              | 7.6              | 7.4              |
| 2009              | 6.8              | 7.3  | 5.8            | 3.5             | 6.2              | 8.2              | 9.4              |
| 2011              | 4.5              | 6.1  | 2.8            | 4.2             | 3.4              | 5.2              | 5.4              |
|                   |                  | •    | United         | States          |                  |                  |                  |
|                   | Total            | Ge   | nder           |                 | Gra              | ade              |                  |
| Year              | Total            | Male | Female         | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003              | 11.1             | 11.6 | 10.4           | 10.9            | 9.0              | 11.4             | 12.8             |
| 2005              | 6.3              | 7.2  | 5.3            | 5.8             | 6.0              | 6.5              | 6.7              |
| 2007              | 5.8              | 6.7  | 4.8            | 4.6             | 5.3              | 5.6              | 7.6              |
| 2009              | 6.7              | 7.6  | 5.5            | 4.9             | 5.2              | 8.7              | 8.0              |
| 2011              | 8.2              | 9.8  | 6.5            | 5.2             | 7.7              | 9.2              | 11.3             |
| Source: YRBS      |                  |      |                |                 | •                |                  | •                |
| Notes: Ecstasy is | also called "MDN | ЛА". |                |                 |                  |                  |                  |

Male high school students (6.3%, 2011) in West Virginia reported a significantly higher percentage of using steroid pills or shots in their lifetime than female high school students (1.1%, 2011) from 2007 to 2011 (YRBS).



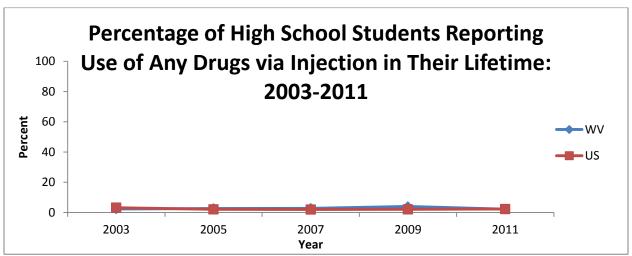
|              |               |      | 160          | ıı              |                  |                  |                  |
|--------------|---------------|------|--------------|-----------------|------------------|------------------|------------------|
| Percentage   | e of High Sch |      | Reporting An | -               |                  | nots in Their I  | ifetime by       |
|              |               |      | West \       | /irginia        |                  |                  |                  |
|              | Total         | Ger  | nder         |                 | Gra              | ade              |                  |
| Year         | Total         | Male | Female       | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003         | 5.6           | 7.3  | 3.7          | 6.7             | 7.4              | 3.3              | 3.8              |
| 2005         | 5.6           | 7.3  | 4.0          | 8.6             | 4.6              | 4.1              | 4.4              |
| 2007         | 5.0           | 6.8  | 3.0          | 5.8             | 5.3              | 4.6              | 3.8              |
| 2009         | 6.0           | 7.4  | 4.1          | 3.3             | 5.7              | 8.2              | 7.1              |
| 2011         | 3.8           | 6.3  | 1.1          | 3.9             | 2.4              | 3.3              | 5.6              |
|              |               |      | United       | States          |                  |                  |                  |
|              | Total         | Ger  | nder         |                 | Gra              | ade              |                  |
| Year         | Total         | Male | Female       | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003         | 6.1           | 6.8  | 5.3          | 7.1             | 6.1              | 5.6              | 4.9              |
| 2005         | 4.0           | 4.8  | 3.2          | 4.8             | 3.9              | 3.7              | 3.3              |
| 2007         | 3.9           | 5.1  | 2.7          | 4.8             | 3.7              | 3.1              | 3.8              |
| 2009         | 3.3           | 4.3  | 2.2          | 3.2             | 3.4              | 3.4              | 3.1              |
| 2011         | 3.6           | 4.2  | 2.9          | 4.2             | 3.2              | 3.7              | 2.8              |
| Source: YRBS |               | •    | •            |                 | •                |                  | •                |

High school students (16.9%) in West Virginia reported a significantly lower percentage of using any prescription drug without a doctor's prescription in their lifetime than the United States (20.7%) in 2011. Males in West Virginia and in the United States reported a higher rate of using any prescription drug without a doctor's prescription in their lifetime than females (YRBS).



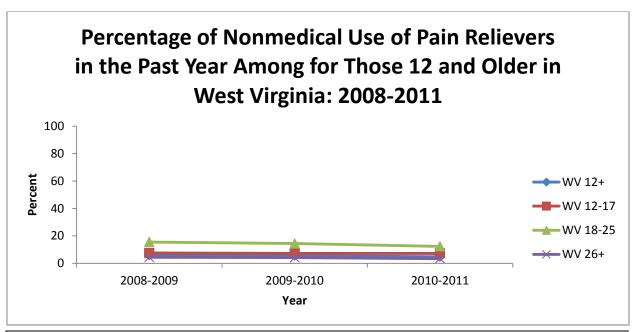
|      | Pro   | escription in | Their Lifetime | by Gender a     | ınd Grade: 20    | )11              |                  |
|------|-------|---------------|----------------|-----------------|------------------|------------------|------------------|
|      |       |               | West V         | irginia         |                  |                  |                  |
|      | Takal | Ge            | nder           |                 | Gra              | ade              |                  |
| Year | Total | Male          | Female         | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2011 | 16.9  | 18.6          | 15.2           | 16.8            | 13.5             | 17.2             | 20.9             |
|      |       |               | United         | States          |                  |                  |                  |
|      | Tatal | Ge            | nder           |                 | Gra              | ade              |                  |
| Year | Total | Male          | Female         | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2011 | 20.7  | 21.5          | 19.8           | 16.5            | 18.2             | 23.3             | 25.6             |

Male high school students (3.4%) in West Virginia reported a significantly higher percentage of use of any drugs via injection in their lifetime than female high school students (0.9%) in 2011 (YRBS).



| Percentag | ge of High Scl |      | s Reporting U<br>ender and Gr | •               | ugs via Injecti<br>111 | on in Their Li   | fetime by        |
|-----------|----------------|------|-------------------------------|-----------------|------------------------|------------------|------------------|
|           |                |      | West \                        | /irginia        |                        |                  |                  |
|           | Total          | Gei  | nder                          |                 | Gra                    | ide              |                  |
| Year      | Total          | Male | Female                        | 9 <sup>th</sup> | 10 <sup>th</sup>       | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003      | 2.3            | 3.1  | 1.4                           | 2.6             | 1.7                    | 0.4              | 3.4              |
| 2005      | 2.7            | 3.3  | 2.1                           | 4.4             | 3.8                    | 0.4              | 1.8              |
| 2007      | 2.8            | 3.2  | 2.2                           | 2.8             | 3.1                    | 3.0              | 1.8              |
| 2009      | 4.0            | 4.5  | 3.3                           | 2.5             | 4.0                    | 3.3              | 6.6              |
| 2011      | 2.2            | 3.4  | 0.9                           | 1.5             | 1.6                    | 1.6              | 4.1              |
|           |                |      | United                        | States          |                        |                  |                  |
|           | Total          | Gei  | nder                          |                 | Gra                    | ide              |                  |
| Year      | Total          | Male | Female                        | 9 <sup>th</sup> | 10 <sup>th</sup>       | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003      | 3.2            | 3.8  | 2.5                           | 3.2             | 3.2                    | 2.8              | 3.0              |
| 2005      | 2.1            | 3.0  | 1.1                           | 2.4             | 2.3                    | 1.7              | 1.7              |
| 2007      | 2.0            | 2.6  | 1.3                           | 2.0             | 1.4                    | 1.9              | 2.4              |
| 2009      | 2.1            | 2.7  | 1.4                           | 2.0             | 2.0                    | 2.5              | 1.8              |
| 2011      | 2.3            | 2.9  | 1.6                           | 2.1             | 2.3                    | 2.4              | 2.2              |

The reported nonmedical use of pain relievers in the past year was highest among those aged 18-25 from 2008-2011 compared to those aged 12-17 and 26 and older in both the United States and West Virginia. West Virginia has had a higher reported rate of nonmedical pain reliever use in the past year among those 12 and older than the United States from 2008-2011 (NSDUH).



| Nonme        | dical Use of Pa | ain Relievers i | n the Past Yea | r Among Thos  | se 12 and Olde | er        |  |
|--------------|-----------------|-----------------|----------------|---------------|----------------|-----------|--|
|              |                 | West Virginia   |                | United States |                |           |  |
| Ages         | 2008-2009       | 2009-2010       | 2010-2011      | 2008-2009     | 2009-2010      | 2010-2011 |  |
| 12-17        | 7.5             | 7.3             | 7.2            | 6.6           | 6.4            | 6.1       |  |
| 18-25        | 15.5            | 14.4            | 12.3           | 12.0          | 11.5           | 10.4      |  |
| 26 and older | 4.4             | 4.1             | 3.4            | 3.4           | 3.5            | 3.4       |  |
| 12 and older | 5.9             | 5.6             | 4.8            | 4.9           | 4.9            | 4.6       |  |

Source: NSDUH

Note: The 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

West Virginia has had a higher annual per capita of retail prescription drugs filled at pharmacies compared to the national annual per capita from 2008-2011 (State Health Facts).



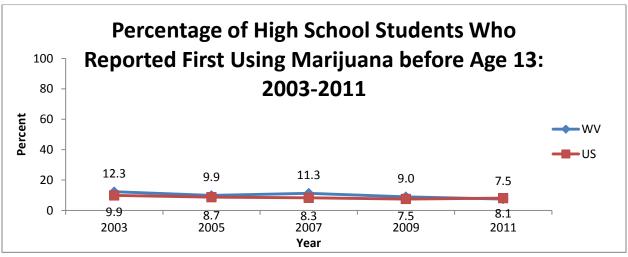
| Average Nun                | nber of Retail Pres | cription Drugs Filled | at Pharmacies (Annu | al Per Capita) |
|----------------------------|---------------------|-----------------------|---------------------|----------------|
|                            | 2008                | 2009                  | 2010                | 2011           |
| West Virginia              | 18.7                | 18.9                  | 18.5                | 19.3           |
| Age 0-18                   | 6.0                 | 6.3                   | 6.0                 | 6.0            |
| Age 19-64                  | 17.4                | 18.4                  | 18.3                | 19.4           |
| Age 65+                    | 41.9                | 38.7                  | 36.4                | 37.3           |
| United States              | 12                  | 12                    | 12                  | 12.1           |
| Age 0-18                   | 3.8                 | 3.9                   | 3.8                 | 4.1            |
| Age 19-64                  | 11.6                | 11.3                  | 11.3                | 11.9           |
| Age 65+                    | 30.1                | 31.2                  | 31.1                | 28.0           |
| Source: State Health Facts |                     |                       |                     |                |

### Age of Initial Use

<u>Indicator Description</u>: This indicator captures the percentage of students who reported their initial use of marijuana before the age of 13.

<u>Why Indicator is Important</u>: According to SAMHSA's Office of Applied Studies (OAS), those who reported that their first use of marijuana was before the age of 12 were twice as likely to have serious mental health illness in the past year compared to those who initiated marijuana use when they were 18 or older. Marijuana is one of the most commonly used illicit drugs. This indicator can help better inform intervention efforts.

Male high school students in West Virginia reported a significantly higher percentage (10.6%) of first use of marijuana before the age of 13 than female high school students (4.3%) (YRBS).



| reiteiltag | e of High Sch | ooi studeiits | Who Reporte<br>and Grade: | 2003-2011       | , ivialijualia b | eiore Age 13     | by delider       |
|------------|---------------|---------------|---------------------------|-----------------|------------------|------------------|------------------|
|            |               |               | West \                    | /irginia        |                  |                  |                  |
|            | Total         | Ge            | nder                      |                 | Gra              | ade              |                  |
| Year       | Total         | Male          | Female                    | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003       | 12.3          | 13.6          | 10.9                      | 10.7            | 9.5              | 10.8             | 18.9             |
| 2005       | 9.9           | 12.8          | 6.8                       | 12.6            | 11.2             | 8.0              | 7.1              |
| 2007       | 11.3          | 15.6          | 6.6                       | 13.8            | 12.2             | 9.1              | 9.0              |
| 2009       | 9.0           | 10.5          | 7.0                       | 11.8            | 9.2              | 9.6              | 4.6              |
| 2011       | 7.5           | 10.6          | 4.3                       | 11.4            | 7.0              | 5.8              | 5.2              |
|            |               |               | United                    | States          |                  |                  |                  |
|            | Total         | Ge            | nder                      |                 | Gra              | ade              |                  |
| Year       | Total         | Male          | Female                    | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003       | 9.9           | 12.6          | 6.9                       | 11.7            | 10.8             | 8.1              | 7.8              |
| 2005       | 8.7           | 11.0          | 6.3                       | 11.2            | 9.1              | 7.1              | 6.2              |
| 2007       | 8.3           | 11.2          | 5.2                       | 9.8             | 8.7              | 7.2              | 6.6              |
| 2009       | 7.5           | 9.7           | 5.0                       | 9.1             | 8.3              | 6.5              | 5.2              |
| 2011       | 8.1           | 10.4          | 5.7                       | 9.7             | 7.5              | 7.6              | 7.0              |

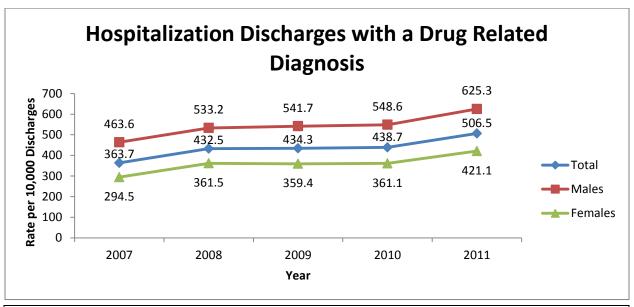
# **Drug Consequences**

## **Drug Related Morbidity**

<u>Indicator Description</u>: This indicator includes hospitalization discharge rates for drug related diagnosis. Also, it includes rate for hepatitis C and HIV/AIDS.

<u>Why Indicator is Important</u>: Frequent drug use can lead to hospitalizations for various drug related conditions including: drug psychoses, dependence, poisoning, withdrawal, to name a few. It is also important to examine the rate of hepatitis B and C and HIV/AIDS which can be transmitted through contaminated needles or other equipment used to inject drugs as well as through unsafe sex. This indicator can be used to gain a better understanding of the problems associated with drug abuse to assist prevention efforts.

Discharges with a drug related diagnosis have steadily increased from 363.7 per 10,000 discharges in 2007 to 506.5 per 10,000 discharges in 2011. Males have had a higher rate per 10,000 discharges with a drug related diagnosis from 2007-2011 (UB).



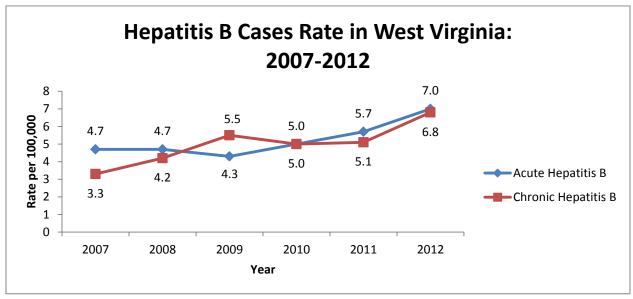
| Hospitalization Discharges with a Drug Related Diagnosis: 2007-2011 |         |         |         |         |         |
|---|---------|---------|---------|---------|---------|
|   | 2007    | 2008    | 2009    | 2010    | 2011    |
| Total Number of Alcohol Related Discharges                          | 9,353   | 11,262  | 11,171  | 11,234  | 13,110  |
| Total Number of Discharges  | 257,180 | 260,367 | 257,217 | 256,074 | 258,834 |
| Total Rate per 10,000 Discharges                                    | 363.7   | 432.5   | 434.3   | 438.7   | 506.5   |
| Total # of Alcohol Related Discharges for Males                     | 4,875   | 5,750   | 5,726   | 5,819   | 6,743   |
| Total Number of Discharges for Males                                | 105,152 | 107,834 | 105,699 | 106,073 | 107,842 |
| Rate per 10,000 Discharges for Males                                | 463.6   | 533.2   | 541.7   | 548.6   | 625.3   |
| Total # of Alcohol Related Discharges for Females                   | 4,476   | 5,512   | 5,444   | 5,415   | 6,357   |
| Total Number of Discharges for Females                              | 152,002 | 152,489 | 151,490 | 149,969 | 150,948 |
| Rate per 10,000 Discharges for Females                              | 294.5   | 361.5   | 359.4   | 361.1   | 421.1   |

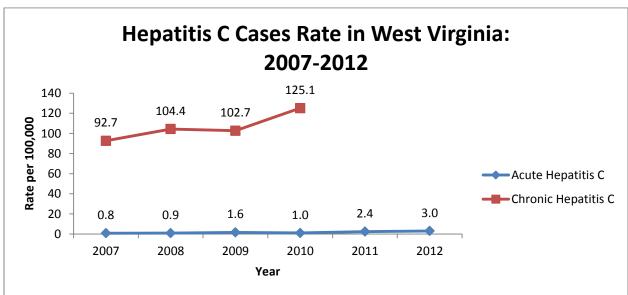
Source: West Virginia Health Care Authority, Uniform Billing Database (UB)

Notes: ICD-9-CM all-listed diagnosis codes: 292, 304, 305.2-305.9, 357.6, 760.72, 760.73, 760.75, 779.5, 965.0, 967, 968.0, 969, 970, E850-E858, E863, E935.0-E935.2, E937-E940, E980. Statistics are based on hospitals that meet the definition of "community hospital" --

nonfederal, short-term, general and other specialty hospitals, including public hospitals and academic medical centers. Excluded facilities are: are federal, rehabilitation, and psychiatric hospitals, as well as alcoholism/chemical dependency treatment facilities. Some years of data have missing gender. Only West Virginia residences were included.

The rate per 100,000 population of acute hepatitis B and chronic hepatitis B has increased between the years 2007 to 2012 in West Virginia. The rate per 100,000 population of acute hepatitis C has more than tripled from 2007 to 2012 (0.8 in 2007 to 3 in 2012) in West Virginia. The rate of chronic hepatitis C increased between the years 2007 to 2010 in West Virginia. In 2012, 7% of reported HIV/AIDS cases in West Virginia were intravenous drug users (OEPS).





|  | Acute Hepatitis B Cases in West Virginia 2007-2012 |                 |                 |                |      |      |  |  |  |  |  |
|--|--|-----------------|-----------------|----------------|------|------|--|--|--|--|--|
|  | 2007   | 2008            | 2009            | 2010           | 2011 | 2012 |  |  |  |  |  |
| Number of cases                                      | 87   | 87              | 79              | 93             | 106  | 129  |  |  |  |  |  |
| Rate per 100,000                                     | 4.7  | 4.7             | 4.3             | 5.0            | 5.7  | 7.0  |  |  |  |  |  |
| Chronic Hepatitis B Cases in West Virginia 2007-2012 |  |                 |                 |                |      |      |  |  |  |  |  |
|  | 2007   | 2008            | 2009            | 2010           | 2011 | 2012 |  |  |  |  |  |
| Number of cases                                      | 61   | 78              | 102             | 92             | 95   | 126  |  |  |  |  |  |
| Rate per 100,000                                     | 3.3  | 4.2             | 5.5             | 5.0            | 5.1  | 6.8  |  |  |  |  |  |
|  | Acute H  | epatitis C Case | es in West Virg | ginia 2007-201 | .2   |      |  |  |  |  |  |
|  | 2007   | 2008            | 2009            | 2010           | 2011 | 2012 |  |  |  |  |  |
| Number of cases                                      | 15   | 16              | 29              | 19             | 44   | 55   |  |  |  |  |  |
| Rate per 100,000                                     | 0.8  | 0.9             | 1.6             | 1.0            | 2.4  | 3.0  |  |  |  |  |  |
|  | Chronic H  | Hepatitis C Cas | es in West Vii  | ginia 2007-20  | 12   |      |  |  |  |  |  |
|  | 2007   | 2008            | 2009            | 2010           | 2011 | 2012 |  |  |  |  |  |
| Number of cases                                      | 1700   | 1921            | 1898            | 2320           | NA   | NA   |  |  |  |  |  |
| Rate per 100,000                                     | 92.7   | 104.4           | 102.7           | 125.1          |      |      |  |  |  |  |  |

Source: Office of Epidemiology and Prevention Services (OEPS), West Virginia Bureau for Public Health

Notes: Rates were calculated using the census population estimates for West Virginia (2007-2009 estimates use the intercensal estimates 2000-2010, and 2010-2012 estimates use vintage year 2012). 2011-2012 chronic hepatitis C numbers were not available at the time of publication.

| HIV/AIDS Cases in West Virginia 2008-2012                   |       |       |      |       |    |  |  |  |  |
|---|-------|-------|------|-------|----|--|--|--|--|
| 2008 2009 2010 2011 2012                                    |       |       |      |       |    |  |  |  |  |
| Total Number of HIV/AIDS Cases                              | 89    | 89    | 86   | 96    | 71 |  |  |  |  |
| Number of HIV/AIDS Cases that are Intravenous Drug Users    | 14    | 12    | 7    | 13    | 5  |  |  |  |  |
| Percentage of HIV/AIDS Cases who are Intravenous Drug Users | 15.7% | 13.5% | 8.1% | 13.5% | 7% |  |  |  |  |

Source: Office of Epidemiology and Prevention Services (OEPS), West Virginia Bureau for Public Health

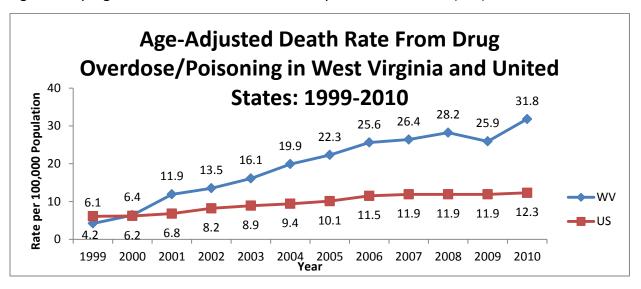
Notes: These are actual numbers of cases of HIV and/or AIDS that were reported to the West Virginia Bureau for Public Health as of December 31, 2012. No adjustments were made for reporting delays. Numbers include persons diagnosed with HIV infection (not AIDS), HIV infection and later AIDS, and concurrent diagnoses of HIV infection and AIDS. <a href="https://www.dhhr.wv.gov/oeps/std-hiv-hep/HIV">https://www.dhhr.wv.gov/oeps/std-hiv-hep/HIV</a> AIDS/Pages/HIVSurveillance.aspx

### **Drug Related Mortality**

<u>Indicator Description</u>: This indicator addresses all of the drug related death rates in West Virginia from overdoses and poisoning, non-prescription drugs, and drug induced causes, HIV/AIDS, and hepatitis C.

<u>Why Indicator is Important</u>: According to the CDC more than 15,500 deaths are attributed to drug overdoses in the United States. This indicator is important because it measures the death rate from drug use and assists prevention efforts by indicating where the highest mortality risk exists.

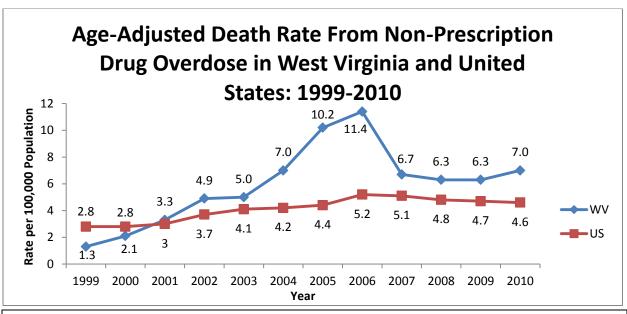
West Virginia has had higher age-adjusted death rates than the nation for drug overdoses and poisonings from 2000 to 2010. There was a significant increase in the death rate for West Virginia from drug overdoses and poisonings between 1999 and 2010; this was also true for males and females. Males have a significantly higher age-adjusted death rate than females from drug overdose and poisoning each year (1999-2009), but not significantly higher in 2010, and a significantly higher death rate for the combined years of 1999-2010 (VSS).



| Age-Adju  | Age-Adjusted Death Rate Per 100,000 Population From Drug Overdose/Poisoning by Gender |               |       |        |                      |       |  |  |  |  |
|-----------|---|---------------|-------|--------|----------------------|-------|--|--|--|--|
| Voor      |   | West Virginia |       |        | <b>United States</b> |       |  |  |  |  |
| Year      | Female  | Male          | Total | Female | Male                 | Total |  |  |  |  |
| 1999      | 2.9   | 5.6           | 4.2   | 3.9    | 8.2                  | 6.1   |  |  |  |  |
| 2000      | 4.9   | 7.9           | 6.4   | 4.1    | 8.3                  | 6.2   |  |  |  |  |
| 2001      | 8.5   | 15.5          | 11.9  | 4.6    | 9                    | 6.8   |  |  |  |  |
| 2002      | 8.1   | 18.9          | 13.5  | 5.8    | 10.6                 | 8.2   |  |  |  |  |
| 2003      | 10.1  | 22.1          | 16.1  | 6.4    | 11.5                 | 8.9   |  |  |  |  |
| 2004      | 14.3  | 25.5          | 19.9  | 6.9    | 11.8                 | 9.4   |  |  |  |  |
| 2005      | 15.9  | 28.7          | 22.3  | 7.3    | 12.8                 | 10.1  |  |  |  |  |
| 2006      | 18.7  | 32.3          | 25.6  | 8.2    | 14.8                 | 11.5  |  |  |  |  |
| 2007      | 19.3  | 33.4          | 26.4  | 8.8    | 14.9                 | 11.9  |  |  |  |  |
| 2008      | 20.2  | 36.1          | 28.2  | 8.9    | 14.9                 | 11.9  |  |  |  |  |
| 2009      | 18.7  | 33.2          | 25.9  | 9.1    | 14.8                 | 11.9  |  |  |  |  |
| 2010      | 25.1  | 38.4          | 31.8  | 9.6    | 15                   | 12.3  |  |  |  |  |
| 1999-2010 | 13.8  | 24.8          | 19.3  | 7      | 12.3                 | 9.7   |  |  |  |  |

Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Apr 24, 2013. ICD-10 codes: X40–X44, X60–X64, X85, Y10–Y14

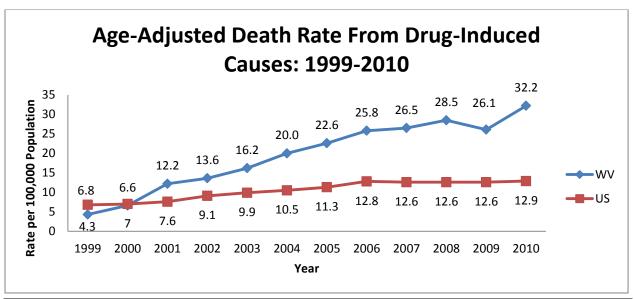
West Virginia has had a higher age-adjusted death rate for non-prescription drug overdoses than the United States since 2001. There was a significant increase between the death rate in 1999 to 2010 for West Virginia and for both genders. In West Virginia, males have had a significantly higher death rate for non-prescription drug overdoses than females from 1999-2010 (VSS).



| Age-Adjusted Death Rate per 100,000 Population From Non-Prescription Drug Overdose by Gender |        |               |       |               |      |       |  |  |  |
|--|--------|---------------|-------|---------------|------|-------|--|--|--|
| Veer   |        | West Virginia |       | United States |      |       |  |  |  |
| Year   | Female | Male          | Total | Female        | Male | Total |  |  |  |
| 1999   | 1.0    | 1.6           | 1.3   | 1.2           | 4.4  | 2.8   |  |  |  |
| 2000   | 1.1    | 3.1           | 2.1   | 1.3           | 4.3  | 2.8   |  |  |  |
| 2001   | 1.1    | 5.5           | 3.3   | 1.5           | 4.5  | 3.0   |  |  |  |
| 2002   | 2.1    | 7.7           | 4.9   | 2.0           | 5.5  | 3.7   |  |  |  |
| 2003   | 2.8    | 7.2           | 5.0   | 2.2           | 6.0  | 4.1   |  |  |  |
| 2004   | 3.2    | 10.8          | 7.0   | 2.4           | 6.0  | 4.2   |  |  |  |
| 2005   | 6.6    | 13.8          | 10.2  | 2.6           | 6.3  | 4.4   |  |  |  |
| 2006   | 7.0    | 15.7          | 11.4  | 2.9           | 7.6  | 5.2   |  |  |  |
| 2007   | 2.9    | 10.5          | 6.7   | 3.0           | 7.2  | 5.1   |  |  |  |
| 2008   | 3.2    | 9.4           | 6.3   | 2.8           | 6.9  | 4.8   |  |  |  |
| 2009   | 3.1    | 9.5           | 6.3   | 2.8           | 6.7  | 4.7   |  |  |  |
| 2010   | 5.0    | 8.9           | 7.0   | 2.8           | 6.4  | 4.6   |  |  |  |
| 1999-2010  | 3.2    | 8.6           | 5.9   | 2.3           | 6.0  | 4.2   |  |  |  |

Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Apr 24, 2013. ICD-10 codes: X42, X62, X85, Y12

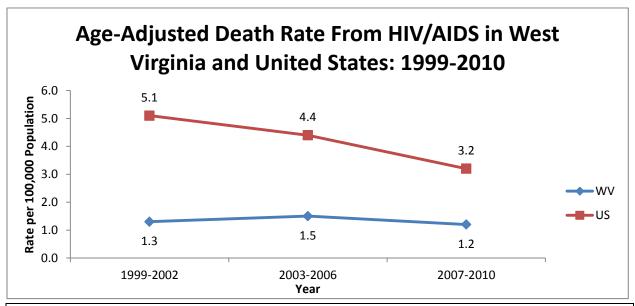
West Virginia has had a higher age-adjusted death rate from drug-induced causes since 2001. Males in West Virginia have had a significantly higher death rate from drug-induced causes than females each year 1999-2009, but not significantly higher in 2010, and significantly higher for the combined years 1999-2010. The death rate from drug-induced causes significantly increased in West Virginia and for both genders from 1999 to 2010 (VSS).



| Age-Adjusted Death Rate per 100,000 Population From Drug-Induced Causes by Gender |               |      |       |               |      |       |  |  |  |
|---|---------------|------|-------|---------------|------|-------|--|--|--|
| Voor  | West Virginia |      |       | United States |      |       |  |  |  |
| Year  | Female        | Male | Total | Female        | Male | Total |  |  |  |
| 1999  | 2.9           | 5.7  | 4.3   | 4.4           | 9.4  | 6.8   |  |  |  |
| 2000  | 5.0           | 8.1  | 6.6   | 4.6           | 9.5  | 7     |  |  |  |
| 2001  | 8.5           | 16.0 | 12.2  | 5.1           | 10.1 | 7.6   |  |  |  |
| 2002  | 8.1           | 19.2 | 13.6  | 6.3           | 11.8 | 9.1   |  |  |  |
| 2003  | 10.2          | 22.4 | 16.2  | 7             | 12.9 | 9.9   |  |  |  |
| 2004  | 14.4          | 25.5 | 20.0  | 7.6           | 13.4 | 10.5  |  |  |  |
| 2005  | 16.0          | 29.1 | 22.6  | 8.1           | 14.5 | 11.3  |  |  |  |
| 2006  | 18.9          | 32.7 | 25.8  | 9.1           | 16.6 | 12.8  |  |  |  |
| 2007  | 19.4          | 33.6 | 26.5  | 9.3           | 16   | 12.6  |  |  |  |
| 2008  | 20.4          | 36.6 | 28.5  | 9.4           | 15.8 | 12.6  |  |  |  |
| 2009  | 18.7          | 33.6 | 26.1  | 9.5           | 15.7 | 12.6  |  |  |  |
| 2010  | 25.5          | 38.8 | 32.2  | 10            | 15.9 | 12.9  |  |  |  |
| 1999-2010   | 13.9          | 25.1 | 19.5  | 7.6           | 13.6 | 10.6  |  |  |  |

Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2010 on CDC WONDER Online Database, released 2012. Data are from the Multiple Cause of Death Files, 1999-2010, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html on May 11, 2013 5:31:24 PM. ICD-10 codes: D59.0, D59.2, D61.1, E16.0, E23.1, E24.2, E27.3, F11.0-F11.5, F11.7, F11.9-F12.2, F12.9, F13.1-F13.3, F13.7, F13.9-F14.5, F14.9-F15.5, F15.7, F15.9-F16.3, F16.5, F16.9, F17.0, F17.3, F17.4, F17.7, F17.9-F18.2, F18.9-F19.5, F19.7, F19.8, F19.9, G21.1, G24.0, G25.4, G62.0, G72.0, I95.2, J70.3, J70.4, K85.3, L10.5, L27.0, L27.1, M32.0, M80.4, M81.4, 87.1, R78.2, R78.3, X40-X44, X60-X64, X85, Y10-Y14

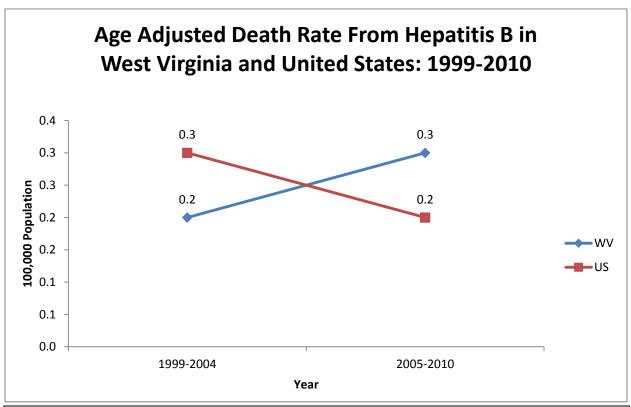
West Virginia has had a lower age-adjusted death rate from HIV/AIDS than the United States from 1999-2010. Males have had a significantly higher death rate than females in West Virginia from HIV/AIDS for each year grouping and all years combined 1999-2010. The death rate from HIV/AIDS significantly decreased in West Virginia and for males between the years 1999 to 2010. However, the death rate for females in West Virginia significantly increased from 1999 to 2010 (VSS).



| Age-Adjusted Death Rate per 100,000 Population From HIV/AIDS by Gender |        |      |       |        |      |       |  |  |  |
|--|--------|------|-------|--------|------|-------|--|--|--|
| West Virginia United States  |        |      |       |        |      |       |  |  |  |
| Year   | Female | Male | Total | Female | Male | Total |  |  |  |
| 1999-2002  | 0.4    | 2.2  | 1.3   | 2.5    | 7.8  | 5.1   |  |  |  |
| 2003-2006  | 0.4    | 2.6  | 1.5   | 2.3    | 6.5  | 4.4   |  |  |  |
| 2007-2010  | 0.7    | 1.6  | 1.2   | 1.8    | 4.6  | 3.2   |  |  |  |
| 1999-2010  | 0.5    | 2.1  | 1.3   | 2.2    | 6.3  | 4.2   |  |  |  |

Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Apr 24, 2013. ICD-10 Codes: B20-B24, R75

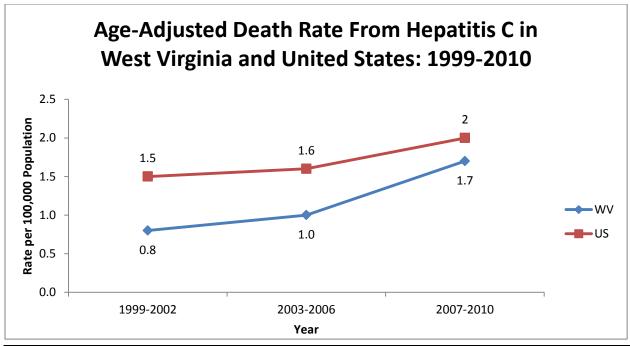
The age adjusted death rate from hepatitis B is very low in West Virginia and the United States (ranging from 0.2-0.3 rate per 100,000 population). The age adjusted death rate for hepatitis B was slightly higher among males in West Virginia and in the United States (VSS).



| Age Adjusted Death Rate From Hepatitis B Per 100,000 by Gender |        |             |       |        |      |       |  |  |
|--|--------|-------------|-------|--------|------|-------|--|--|
| Veer   | Uni    | ited States |       |        |      |       |  |  |
| Year   | Female | Male        | Total | Female | Male | Total |  |  |
| 1999-2004  | 0.1    | 0.1         | 0.2   | 0.1    | 0.4  | 0.3   |  |  |
| 2005-2010  | 0.1    | 0.4         | 0.3   | 0.1    | 0.3  | 0.2   |  |  |
| 1999-2010  | 0.1    | 0.3         | 0.2   | 0.1    | 0.4  | 0.2   |  |  |

Source for WV: West Virginia Health Statistics Center. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Sept 24, 2013. ICD-10 Codes: B16.0-16.9, B17.0, B18.0, B18.1

West Virginia has had a lower age-adjusted death rate for hepatitis C than the United States from 1999 to 2010. Males have a significantly higher death rate from hepatitis C than females in West Virginia for each year grouping and all years combined 1999-2010. The hepatitis C death rate significantly increased in West Virginia and for both genders from 1999 to 2010 (VSS).



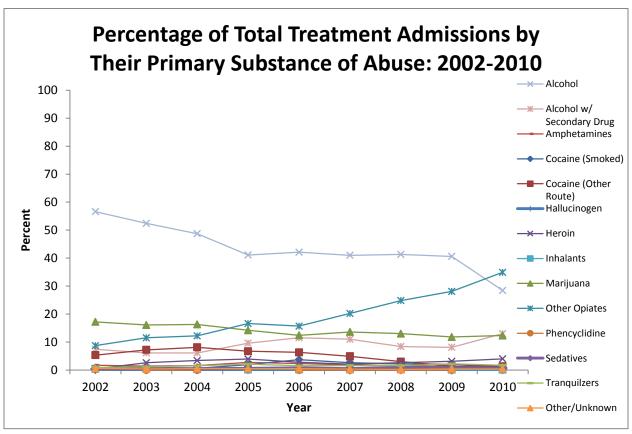
| Age-Adjusted Death Rate per 100,000 Population From Hepatitis C by Gender |                             |      |       |        |      |       |  |  |  |
|---|-----------------------------|------|-------|--------|------|-------|--|--|--|
| Voor  | West Virginia United States |      |       |        |      |       |  |  |  |
| Year  | Female                      | Male | Total | Female | Male | Total |  |  |  |
| 1999-2002   | 0.6                         | 0.9  | 0.8   | 1.1    | 2.1  | 1.5   |  |  |  |
| 2003-2006   | 0.6                         | 1.5  | 1.0   | 1.1    | 2.2  | 1.6   |  |  |  |
| 2007-2010   | 1.1                         | 2.3  | 1.7   | 1.3    | 2.7  | 2     |  |  |  |
| 1999-2010   | 0.8                         | 1.6  | 1.2   | 1.2    | 2.4  | 1.7   |  |  |  |

Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Apr 24, 2013. ICD-10 Codes: B17.1, B18.2

#### **Treatment**

<u>Indicator Description</u>: This indicator examines treatment admissions for substance abuse. <u>Why Indicator is Important</u>: This indicator is important because it demonstrates the rate of admissions to drug treatment facilities by the primary substance being abused, which is creating a burden on public funds. Also, this indicator assists prevention and rehabilitation efforts by indicating the areas with the greatest need based on the primary substance of abuse.

The Treatment Episode Data Set (TEDS) annually records 1.8 million admissions to treatment facilities for abuse of alcohol and drugs that are reported to state administrative data systems. The graph below illustrates the percentage of treatment admissions by primary substance abuse for 2002 through 2010 (see Appendix A for detailed tables on treatment admissions). Males had a higher percentage (60.9%) of treatment admissions in West Virginia than females in 2010.



Source: TEDS

Smoked cocaine mainly represents crack or rock cocaine, but can include cocaine hydrochloride (powder cocaine) when it is free-based. West Virginia has a lower percentage of primary treatment admissions for cocaine (smoked) when compared to the national percentage (1.3% of admissions in WV, 5.8% of admissions in US). The percentage of treatment admissions in West Virginia for cocaine (smoked) has been higher among females from 2002 to 2010, ranging from 54.7%-100% out of all cocaine (smoked) treatment admissions, compared to males. Nationally, males have a slightly higher percentage for treatment admission for cocaine

(smoked) than females. Over 86% of admissions for treatment for cocaine (smoked) in West Virginia in 2010 were for patients aged 21-45.

Cocaine (other route) or non-smoked cocaine admissions are where the route of consumption is not reported, so the cocaine (smoked) estimates from TEDS are conservative. The percent of admissions for cocaine (other) in West Virginia (1.3%) was lower than the national percentage (2.4%). In 2010, males accounted for 63.3% of the admissions for cocaine (other route) in West Virginia, which was similar to the US percentage (67% of males).

The marijuana category includes admissions for THC and any other cannabis sativa preparation. Marijuana treatment admissions in West Virginia were lower (12.3%) than the national percentage (18.6%). The majority of admissions in West Virginia and in the US are among people 12-35 years old. Males account for a higher percentage of treatment admissions for marijuana (WV 66.1%, US 73.2%) than females.

Heroin treatment admissions in West Virginia (4%) are lower than the national percentage (13.9%). Seventy-five percent of heroin admissions in West Virginia were among people 21-35 years old. While males in United States have had a higher percentage of treatment admissions for heroin than females from 2003-2010 (US males: ranging from 66.6%-68.3%) in West Virginia they have had, at times, a lower percentage of admission than females (WV males: ranging from 44.7%-55.3%).

The other opiates category includes admissions for non-prescription use of methadone, codeine, morphine, oxycodone, hydromorphone, meperidine, opium, and other drugs with morphine-like effects. Other opiates accounted for the highest percentage of treatment admissions in West Virginia in 2010 (34.9%), which was four times higher than the national percentage (8.7%). The majority of treatment admissions for other opiates in West Virginia are among people 21-40 years old.

There were only 4 treatment admissions each for hallucinogens and inhalants as the primary substance of abuse in West Virginia in 2010.

The amphetamines category includes methamphetamines and other amphetamines such as Benzedrine, Dexedrine, Preludin, Ritalin and any other amines and related drugs. Amphetamines constituted 1.8% of treatment admissions in West Virginia in 2010, which was over 3 times lower than the US percentage (6. 1%).

The tranquilizers category includes admissions for benzodiazepines, which include diazepam, flurazepam, chlordiazepoxide, clorazepate, lorazepam, alprazolam, oxazepam, temazepam, prazepam, triazolam, clonazepam, halazepam and other tranquilizers. West Virginia had 1.7% of treatment admissions for tranquilizers substance abuse in 2010, which was higher than the US percentage (0.9%). The majority of admissions for tranquilizers in West Virginia were for

people 18-40 years old in 2010. Females had a much higher percentage of admissions for tranquilizer abuse in West Virginia in 2010 (80.3%) than males.

The sedatives category includes admissions for barbiturates including phenobarbital, Seconal, Nembutal and other sedatives/hypnotics such as chloral hydrate, Placidyl, Doriden, etc. West Virginia had a higher percentage of treatment admissions for sedatives (0.7%) than the US (0.2%) in 2010. Females constituted the majority of sedative admissions in West Virginia (66.7%) in 2010.

The other/unknown category includes admissions for other or unknown substances not listed or included in another category. Other/unknown treatment admissions accounted for 0.4% of admissions in West Virginia in 2010 (TEDS).

#### Crime

<u>Indicator Description</u>: This indicator addresses the number of drug related arrests or offenses in West Virginia.

<u>Why Indicator is Important</u>: According to the Bureau of Justice and Statistics, in 2004 17% of state prisoners and 18% of federal prisoners committed offenses to obtain funds for drugs. Some drug related crimes are to use, possess, manufacture, traffic, produce or distribute drugs which have the potential for abuse. This indicator is important to demonstrate the effects drug use has on the state. These crimes are costly to society and have a social impact. The crime statistics for drug related crimes can be used to assist prevention efforts in the state and demonstrate the negative impact this problem has on society.

There has been an increase in the number of DUI revocations for use of drugs in West Virginia from 848 to 1,368 between the years 2010-2012. There was also an increase in the number of DUI revocations for use of drugs among commercial driver's license holders from 17 to 40 between the years 2010-2012 (WVDMV).

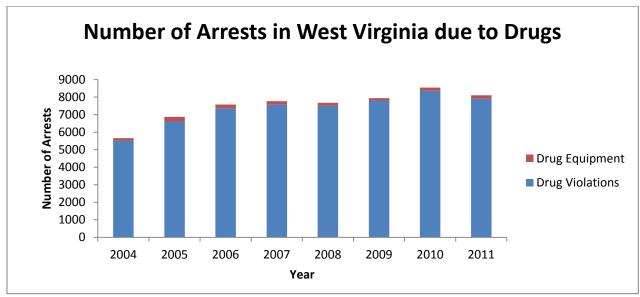
| Driving Under the Influence Revocations for Use of Drugs in West Virginia (FY2010-FY2012) |     |     |       |  |  |  |  |  |  |
|---|-----|-----|-------|--|--|--|--|--|--|
| FY2010 FY2011 FY2012  |     |     |       |  |  |  |  |  |  |
| drugs/controlled substance  | -   | -   | 912   |  |  |  |  |  |  |
| drugs/controlled substance combined with alcohol  | -   | -   | 456   |  |  |  |  |  |  |
| Use of drugs  | 848 | 941 | 1,368 |  |  |  |  |  |  |

Source: WV Department of Motor Vehicle (WVDMV)

Notes: All DUI offenses must be reported to the DMV within 48 hours of the incidence. Fiscal Year is from July 1st to June 30th. Subcategories for use of drugs only became available for FY2012.

| Driving Under the Influence Revocations for Use of Drugs of Commercial Driver's License (CDL)  Holders in West Virginia (FY2010-FY2012) |                    |              |    |  |  |  |  |  |  |
|---|--------------------|--------------|----|--|--|--|--|--|--|
| FY2010 FY2011 FY2012  |                    |              |    |  |  |  |  |  |  |
| Use of drugs  | 17                 | 23           | 40 |  |  |  |  |  |  |
| Source: WV Department of Motor Vehicle (WVDMV)  |                    |              |    |  |  |  |  |  |  |
| Notes: All DUI offenses must be reported to the DMV within 48 hours of the incidence. Fiscal Year                                       | is from July 1st t | o June 30th. |    |  |  |  |  |  |  |

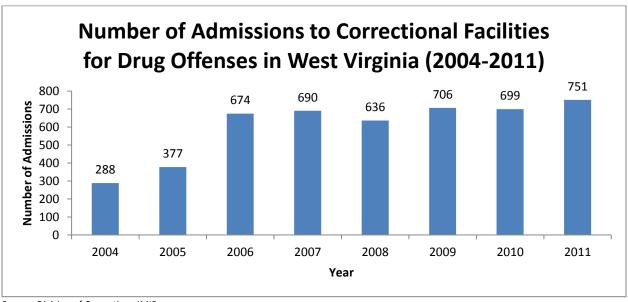
There were 7907 drug violation arrests and 199 drug equipment arrests in West Virginia in 2011. The number of drug violation arrests increased over 40% from 2004 to 2010 (WVIBRS).



| Number of Arrests in West Virginia due to Drugs |  |      |      |      |      |      |      |      |  |
|---|--|------|------|------|------|------|------|------|--|
| 2004 2005 2006 2007 2008 2009 2010 2011         |  |      |      |      |      |      |      |      |  |
| Drug Violations                                 | 5517   | 6603 | 7359 | 7569 | 7513 | 7799 | 8355 | 7907 |  |
| Drug Equipment                                  | 138  | 269  | 219  | 194  | 163  | 139  | 185  | 199  |  |
| Source: West Virginia Incident-Based            | Source: West Virginia Incident-Based Reporting System (WVIBRS) |      |      |      |      |      |      |      |  |

Notes: Caution should be used when making year to year comparisons due to differences in reporting levels of agencies over time.

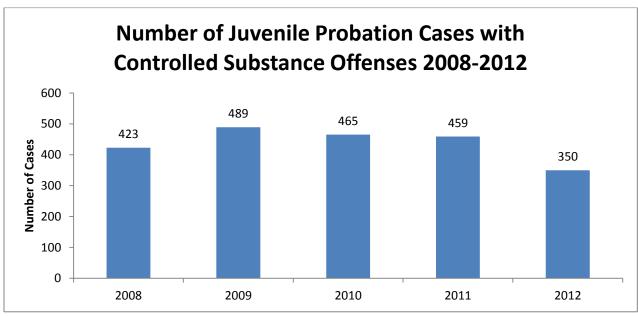
The number of admissions to correctional facilities for drug offenses in West Virginia was 751 in 2011 (IMIS).



Source: Division of Corrections IMIS

Notes: Admissions include all those offenders entering a DOC facility during the indicated year for the crime specified.

The number of juvenile probation cases with a controlled substance offense in 2012 was 350, which was a decrease of nearly 24% from 2011. The largest group of offenses, 220, was for possession of controlled substance (WVJJDB).



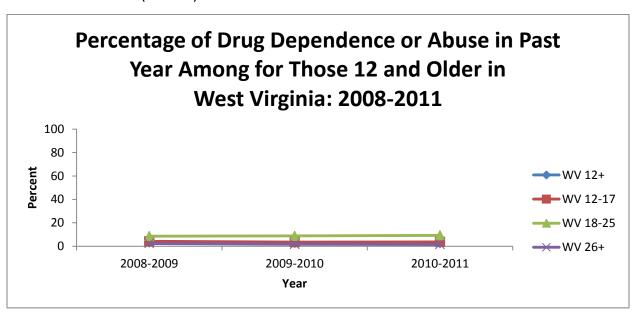
| Number of Juvenile Probation Cases with Controlled Substance Offense 2008-2012        |      |      |      |      |      |  |  |  |  |
|---|------|------|------|------|------|--|--|--|--|
| Charge Code Description   | 2008 | 2009 | 2010 | 2011 | 2012 |  |  |  |  |
| Breathing, inhaling, or drinking certain intoxicating compounds; penalty              | 8    | 4    | 7    | 2    | 6    |  |  |  |  |
| Equipment used to counterfeit substances  | 0    | 0    | 1    | 0    | 0    |  |  |  |  |
| Imitation controlled substance  | 1    | 0    | 0    | 7    | 5    |  |  |  |  |
| Items designed or marketed for use with controlled substances                         | 0    | 1    | 0    | 0    | 0    |  |  |  |  |
| Manufacture, deliver counterfeit I,II,III,IV substances                               | 12   | 1    | 9    | 11   | 7    |  |  |  |  |
| Manufacture, deliver counterfeit Schedule V Misdemeanor                               | 0    | 1    | 3    | 0    | 0    |  |  |  |  |
| Manufacture, deliver Schedule I,II,III,IV Felony                                      | 103  | 117  | 126  | 119  | 101  |  |  |  |  |
| Manufacture, deliver Schedule V - Misdemeanor   | 12   | 13   | 10   | 7    | 3    |  |  |  |  |
| Operating or attempting to operate clandestine drug laboratories; offenses; penalties | 0    | 1    | 0    | 3    | 4    |  |  |  |  |
| Possession of Controlled Substance  | 278  | 343  | 299  | 305  | 220  |  |  |  |  |
| Sale of drug paraphernalia at certain events or outdoors prohibited.                  | 6    | 0    | 0    | 0    | 0    |  |  |  |  |
| Transportation of Schedule I-IV controlled substance                                  | 1    | 1    | 0    | 0    | 0    |  |  |  |  |
| Transportation of Schedule V controlled substance                                     | 2    | 7    | 10   | 4    | 4    |  |  |  |  |
| Unlawfully distributed as registrant Schedule I or II                                 | 0    | 0    | 0    | 1    | 0    |  |  |  |  |
| Total Juvenile Controlled Substance Offenses  | 423  | 489  | 465  | 459  | 350  |  |  |  |  |
| Source: West Virginia Juvenile Justice Database (WVJJDB)                              | •    |      |      |      |      |  |  |  |  |

### **Drug Dependence or Abuse**

<u>Indicator Description</u>: This indicator examines the reported drug dependence or abuse in West Virginia and the United States.

<u>Why Indicator is Important</u>: Drug dependence, according to the Diagnostic and Statistical Manual of Mental Disorders (DSM) by the American Psychiatric Association (APA), is defined as when an individual persists in the use of drugs despite problems related to the use of the substance. Drug abuse refers to a destructive pattern of the use of drugs that is not considered dependent. Drug abuse and dependence can create difficulties which can affect work, school, or family responsibilities, and can lead to drug arrests and car crashes. It can also increase the risk of overdose deaths.

Those aged 18-25 reported the highest drug dependence or abuse in the past year from 2008 to 2011 compared to those aged 12-17 and 26 and older. Also, those aged 18-25 had the highest reported drug dependence in the past year for 2008-2011 compared to those aged 12-17 and 26 and older (NSDUH).



| Percentage of Drug Dependence or Abuse in Past Year Among Those 12 and Older |               |           |           |               |           |           |  |
|--|---------------|-----------|-----------|---------------|-----------|-----------|--|
|  | West Virginia |           |           | United States |           |           |  |
| Ages   | 2008-2009     | 2009-2010 | 2010-2011 | 2008-2009     | 2009-2010 | 2010-2011 |  |
| 12-17  | 4.1           | 3.5       | 3.7       | 4.5           | 4.5       | 4.7       |  |
| 18-25  | 8.6           | 8.8       | 9.3       | 7.8           | 7.8       | 7.7       |  |
| 26 and older   | 2.3           | 1.7       | 1.5       | 1.7           | 1.7       | 1.6       |  |
| 12 and older   | 3.2           | 2.7       | 2.6       | 2.8           | 2.8       | 2.7       |  |

Percentage of Drug Dependence in Past Year Among Those 12 and Older

|              | West Virginia |           |           | United States |           |           |  |
|--------------|---------------|-----------|-----------|---------------|-----------|-----------|--|
| Ages         | 2008-2009     | 2009-2010 | 2010-2011 | 2008-2009     | 2009-2010 | 2010-2011 |  |
| 12-17        | 2.5           | 2.1       | 2.5       | 2.5           | 2.4       | 2.5       |  |
| 18-25        | 6.7           | 7.5       | 7.7       | 5.6           | 5.4       | 5.4       |  |
| 26 and older | 1.8           | 1.4       | 1.2       | 1.3           | 1.3       | 1.1       |  |
| 12 and older | 2.5           | 2.2       | 2.1       | 2.0           | 1.9       | 1.8       |  |

Source: NSDUH

Note: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically, including data from original methamphetamine questions but not including new methamphetamine items added in 2005 and 2006. Dependence or abuse is based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

The highest reported rate of needing but not receiving treatment for illicit drug use in the past year was among those 18-25 years old from 2008-2011 compared to those aged 12-17 and 26 and older (NSDUH).

| Percentage of Needing But Not Receiving Treatment for Illicit Drug Use in the Past Year Among Those |
|---|
| 12 and Older  |

|              | West Virginia |           |           | United States |           |           |
|--------------|---------------|-----------|-----------|---------------|-----------|-----------|
| Ages         | 2008-2009     | 2009-2010 | 2010-2011 | 2008-2009     | 2009-2010 | 2010-2011 |
| 12-17        | 3.9           | 3.2       | 3.3       | 4.2           | 4.2       | 4.3       |
| 18-25        | 7.7           | 7.7       | 8.5       | 7.2           | 7.1       | 7.0       |
| 26 and older | 2.1           | 1.4       | 1.3       | 1.5           | 1.5       | 1.3       |
| 12 and older | 2.9           | 2.3       | 2.3       | 2.5           | 2.5       | 2.4       |

Source: NSDUH

Note: Needing But Not Receiving Treatment refers to respondents classified as needing treatment for illicit drugs, but not receiving treatment for an illicit drug problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). Illicit Drugs include marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, or prescription-type psychotherapeutics used non-medically, including data from original methamphetamine questions but not including new methamphetamine items added in 2005 and 2006. 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

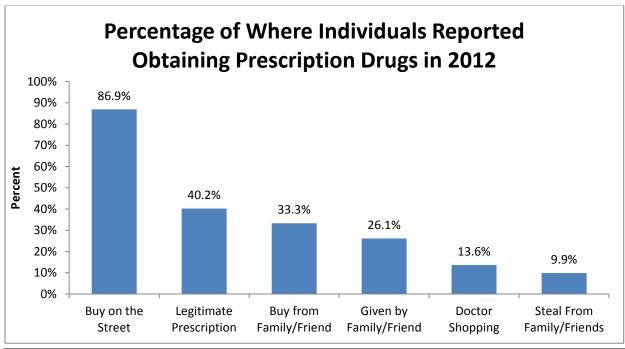
# **Drug Use Risk & Protective Factors**

#### **Access**

<u>Indicator Description</u>: This indicator examines where individuals report accessing prescription drugs.

<u>Why Indicator is Important</u>: It is important to have a better understanding of how to limit risk factors while strengthening and increasing access to protective resources to reduce drug abuse and create healthier individuals and communities. Understanding access to drugs is an important piece in prevention interventions.

According to the West Virginia Prescription Drug Abuse Quitline, the most common responses for where respondent's indicated that they obtained their prescription drugs in 2012 were: buy on the street (86.9%), legitimate prescription (40.2%), and buying from family or friend (33.3%).



| Percentage of Where Individuals Reported Obtaining Prescription Drugs in 2012 |                        |                |               |                 |           |  |  |  |
|---|------------------------|----------------|---------------|-----------------|-----------|--|--|--|
|   | Have Obtaine           | d Prescription | Never Obtaine | ed Prescription | Total     |  |  |  |
|   | Drugs From This Source |                | Drug From     | This Source     | Responses |  |  |  |
| Source  | %                      | #              | %             | #               | #         |  |  |  |
| Buy on the Street   | 86.9%                  | 113            | 13.1%         | 17              | 130       |  |  |  |
| Legitimate Prescription   | 40.2%                  | 33             | 59.8%         | 49              | 82        |  |  |  |
| Buy from Family/Friend  | 33.3%                  | 32             | 66.7%         | 64              | 96        |  |  |  |
| Given by Family/Friend  | 26.1%                  | 23             | 73.9%         | 65              | 88        |  |  |  |
| Doctor Shopping   | 13.6%                  | 12             | 86.4%         | 76              | 88        |  |  |  |
| Steal From Family/Friends   | 9.9%                   | 8              | 90.1%         | 73              | 81        |  |  |  |
| Source: West Virginia Prescription Drug                                       | Quitline               | •              |               |                 |           |  |  |  |

### **Perception of Harm**

**Indicator Description**: The perception of harm from smoking marijuana.

Why Indicator is Important: The perception of harm from smoking marijuana can influence one's decision to use the drug. In families where parents smoke marijuana or are tolerant of children's use, the more likely they are to smoke marijuana as adolescents. It is important to have a better understanding of how to limit risk factors while strengthening and increasing access to protective resources to reduce smoking marijuana and create healthier individuals and communities. The perception of harm from smoking marijuana is associated with marijuana use and understanding this can be used in prevention interventions.

The reported perception of harm from smoking marijuana was lowest among those aged 18-25 in West Virginia and in the United States compared to those 12-17 and 26 and older (NSDUH).

| Percentage of | Percentage of Those with Perceptions of Great Risk of Smoking Marijuana Once a Month Among |               |                             |           |           |           |  |  |  |
|---------------|--|---------------|-----------------------------|-----------|-----------|-----------|--|--|--|
|               | Those 12 and Older   |               |                             |           |           |           |  |  |  |
|               |  | West Virginia | Vest Virginia United States |           |           |           |  |  |  |
| Ages          | 2008-2009  | 2009-2010     | 2010-2011                   | 2008-2009 | 2009-2010 | 2010-2011 |  |  |  |
| 12-17         | 38.2   | 35.8          | 37.1                        | 31.8      | 29.9      | 28.6      |  |  |  |
| 18-25         | 23.7   | 21.2          | 20.3                        | 21.3      | 19.2      | 18.3      |  |  |  |
| 26 and older  |  |               |                             |           |           |           |  |  |  |

12 and older
Source: NSDUH

44.0

Note: 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

37.1

35.8

33.6

32.3

40.0

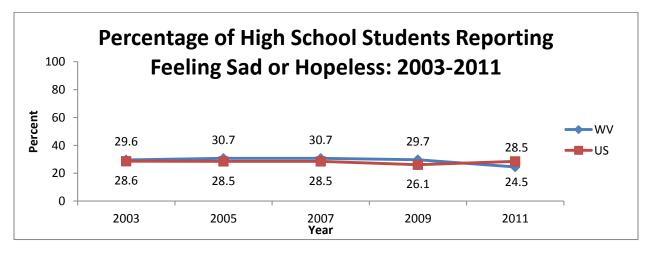
# **Mental Health**

## **Depression and Psychological Distress**

<u>Indicator Description</u>: This indicator examines reported mental health issues such as depression prevalence in West Virginia and the United States.

<u>Why Indicator is Important</u>: Mental health is a vital part of health, it is the state of well-being and ability to function in society. Depression is a mental health disorder which causes feelings of sadness and anxiety which can last for weeks. There is a strong correlation between mental health and substance abuse; there is a higher rate of substance abuse among those with a mental illness. This indicator is important to prevention providers to identify those with mental health and substance abuse issues to address co-occurring illnesses, which must be treated together.

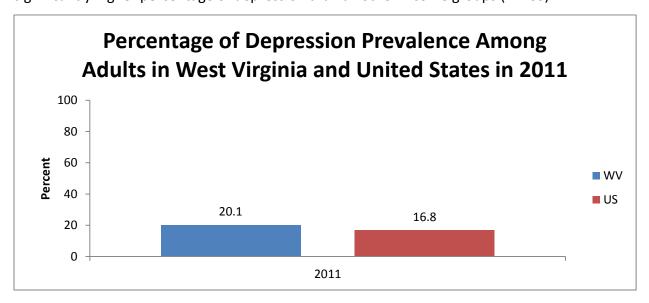
From 2007 to 2011 female high school students in West Virginia were significantly more likely than males to feel sad or hopeless. High school students in West Virginia were significantly less likely to report having been sad or hopeless compared to the nation in 2011 (YRBS).



|      |       |      | 20     | 11              |                  |                  |                  |
|------|-------|------|--------|-----------------|------------------|------------------|------------------|
|      |       |      | West \ | /irginia        |                  |                  |                  |
|      | Total | Ge   | nder   |                 | Gra              | ade              |                  |
| Year | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003 | 29.6  | 22.6 | 41.7   | 31.7            | 31.4             | 30.4             | 35.0             |
| 2005 | 30.7  | 24.7 | 34.4   | 31.8            | 31.2             | 30.6             | 25.4             |
| 2007 | 30.7  | 20.5 | 40.9   | 30.5            | 27.8             | 35.0             | 30.3             |
| 2009 | 29.7  | 22.9 | 36.7   | 22.5            | 33.8             | 30.2             | 32.5             |
| 2011 | 24.5  | 16.8 | 32.6   | 25.5            | 23.5             | 23.7             | 25.2             |
|      |       |      | United | States          |                  |                  |                  |
|      | Total | Ge   | nder   |                 | Gra              | ade              |                  |
| Year | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003 | 28.6  | 21.9 | 35.5   | 28.0            | 29.7             | 28.9             | 27.4             |
| 2005 | 28.5  | 20.4 | 36.7   | 29.0            | 28.9             | 28.8             | 26.4             |
| 2007 | 28.5  | 21.2 | 35.8   | 28.2            | 28.9             | 27.1             | 29.4             |
| 2009 | 26.1  | 19.1 | 33.9   | 26.6            | 26.1             | 27.3             | 24.3             |
| 2011 | 28.5  | 21.5 | 35.9   | 27.6            | 28.7             | 28.8             | 28.9             |

activities.

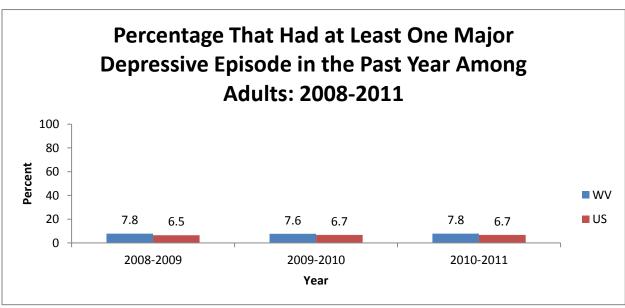
West Virginia had the 14<sup>th</sup> highest percentage of depression among adults in the nation, which was significantly higher than the US. Adult females had a significantly higher percentage of depression than males in West Virginia. The highest percentage of depression in adults was among those 45-54, which was significantly higher than those 25-44 and 65 and older. Adults with less than a high school education had a significantly higher percentage of depression compared to college graduates. Also, adults with an income less than \$15,000 had a significantly higher percentage of depression than all other income groups (BRFSS).



|               | Depression Prevalence |        |       |                               |       |       |       |     |
|---------------|-----------------------|--------|-------|-------------------------------|-------|-------|-------|-----|
| West Virginia |                       |        |       |                               |       |       |       |     |
| Total         | Ger                   | ider   |       |                               | A     | ge    |       |     |
| Total         | Male                  | Female | 18-24 | 25-34                         | 35-44 | 45-54 | 55-64 | 65+ |
| 20.1          | 15.6                  | 24.4   | 20.0  | 20.0 19.3 20.2 26.9 23.5 12.4 |       |       |       |     |

Sources: WV Health Statistics Center, Behavioral Risk Factor Surveillance System and CDC BRFSS website (WV data is estimated prevalence and the US data is median prevalence).

West Virginia has had a higher reported rate of having had at least one major depressive episode in the past year among adults compared to the United States from 2008 to 2011 (NSDUH).

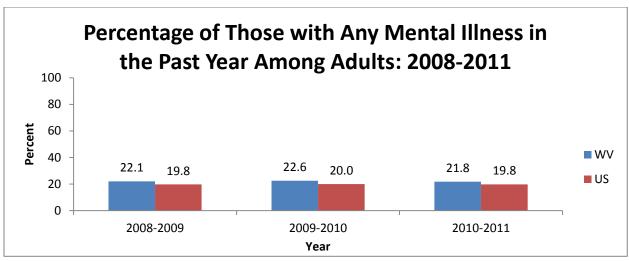


| Percentage That Had at Least One Major Depressive Episode in the Past Year |               |           |           |               |           |           |  |
|--|---------------|-----------|-----------|---------------|-----------|-----------|--|
|  | West Virginia |           |           | United States |           |           |  |
| Ages   | 2008-2009     | 2009-2010 | 2010-2011 | 2008-2009     | 2009-2010 | 2010-2011 |  |
| 12-17  | 8.4           | 8.0       | 8.4       | 8.2           | 8.1       | 8.1       |  |
| 18-25  | 8.8           | 8.1       | 7.7       | 8.2           | 8.2       | 8.3       |  |
| 26 and older   | 7.6           | 7.6       | 7.9       | 6.2           | 6.5       | 6.4       |  |
| 18 and older   | 7.8           | 7.6       | 7.8       | 6.5 6.7 6.7   |           |           |  |

Source: NSDUH

Note: Major depressive episode is defined as in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. There are minor wording differences in the questions in the adult and adolescent major depressive episode modules. Therefore, data from youths aged 12 to 17 were not combined with data from persons aged 18 or older to produce an estimate for those aged 12 or older. 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

Adults in West Virginia reported a higher rate of any mental illness in the past year than the United States between the years 2008-2011. Adults in West Virginia and the United States aged 18-25 reported a higher rate of any mental illness in the past year compared to those 26 and older between the years of 2008-2011 (NSDUH).

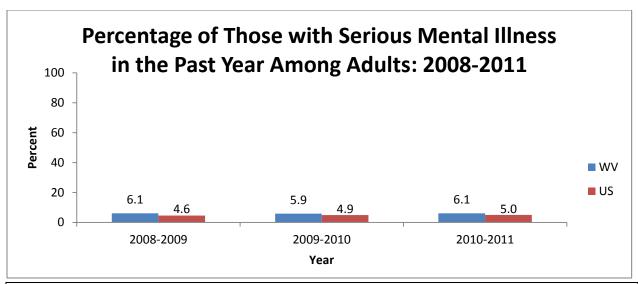


| Percentage of Those with Any Mental Illness in the Past Year Among Adults |               |           |           |               |           |           |  |
|---|---------------|-----------|-----------|---------------|-----------|-----------|--|
|   | West Virginia |           |           | United States |           |           |  |
| Ages  | 2008-2009     | 2009-2010 | 2010-2011 | 2008-2009     | 2009-2010 | 2010-2011 |  |
| 18-25   | 32.2          | 30.0      | 29.9      | 30.7          | 30.2      | 30.0      |  |
| 26 and older  | 20.7          | 21.4      | 20.6      | 17.9          | 18.3      | 18.1      |  |
| 18 and older  | 22.1          | 22.6      | 21.8      | 19.8          | 20.0      | 19.8      |  |

Source: NSDUH

Note: Any Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a developmental or substance use disorder that met the criteria found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

Adults in West Virginia reported a higher rate of serious mental illness in the past year than the United States from 2008-2011. Adults in West Virginia and the United States 18-25 years old reported a higher rate of serious mental illness in the past year than those 26 and older from 2008-2011 (NSDUH).



| Percentage of Those with Serious Mental Illness in the Past Year Among Adults |               |           |           |               |           |           |  |  |
|---|---------------|-----------|-----------|---------------|-----------|-----------|--|--|
|   | West Virginia |           |           | United States |           |           |  |  |
| Ages  | 2008-2009     | 2009-2010 | 2010-2011 | 2008-2009     | 2009-2010 | 2010-2011 |  |  |
| 18-25   | 8.4           | 7.5       | 7.6       | 7.4           | 7.6       | 7.7       |  |  |
| 26 and older  | 5.7           | 5.6       | 5.9       | 4.1           | 4.5       | 4.5       |  |  |
| 18 and older  | 6.1           | 5.9       | 6.1       | 4.6           | 4.9       | 5.0       |  |  |

Source: NSDUH

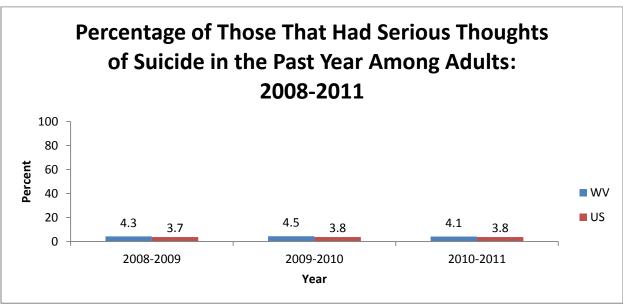
Note: Serious Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a developmental or substance use disorder that met the criteria found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and resulted in serious functional impairment. 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

#### Suicide

<u>Indicator Description</u>: This indicator examines the prevalence of suicide and suicide attempts in West Virginia and the United States.

Why Indicator is Important: Suicide is a serious public health issue. According to the CDC, it is the 10<sup>th</sup> leading cause of death in the nation. The leading methods for suicide are firearms, suffocation, and poisoning. Some of the risk factors for suicide are: previous suicide attempts, family history of suicide, depression and mental illness, drug and alcohol abuse, and stress. The National Violent Death Reporting System, reported in 2007, that one-third of suicide victims tested positive for alcohol at the time of death and nearly 1 in 4 had evidence of opiates, including heroin and prescription pain killers. This indicator is important to increase awareness surrounding factors that can put a person at risk for attempting suicide. Suicide prevention providers need to identify those with mental health and substance abuse issues and address cooccurring illnesses.

Adults in West Virginia reported a higher prevalence of having serious thoughts of suicide in the past year from 2008-2011. Adults in West Virginia and the United States aged 18-25 have a higher prevalence of having had thoughts of suicide than those 26 and older from 2008-2011 (NSDUH).

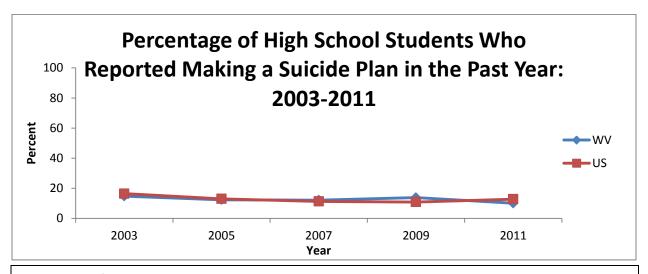


| Percentage of Those That Had Serious Thoughts of Suicide in the Past Year Among Adults |                         |           |           |               |           |           |  |
|--|-------------------------|-----------|-----------|---------------|-----------|-----------|--|
|  | West Virginia           |           |           | United States |           |           |  |
| Ages   | 2008-2009               | 2009-2010 | 2010-2011 | 2008-2009     | 2009-2010 | 2010-2011 |  |
| 18-25  | 7.3                     | 6.8       | 6.4       | 6.4           | 6.4       | 6.7       |  |
| 26 and older   | 3.9                     | 4.1       | 3.8       | 3.3           | 3.3       | 3.2       |  |
| 18 and older   | 4.3 4.5 4.1 3.7 3.8 3.8 |           |           |               |           |           |  |

Source: NSDUH

Note: 2008-2011 data was revised March 2012. State estimates: along with the 95 percent Bayesian confidence (credible) intervals, are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques. US estimates: design-based (direct) estimates and corresponding 95 percent confidence intervals.

High school students in West Virginia reported a significantly lower rate (10.1%) of having made a plan about how they would attempt suicide compared to the nation (12.8%) in 2011. Female high school students were significantly more likely to report having made a suicide plan than male students in West Virginia in 2009 and 2011 (YRBS).



Percentage of High School Students Who Reported Making a Suicide Plan in the Past Year by Gender and Grade: 2003-2011

West Virginia

|      | 11.601 16 |      |        |                 |                  |                  |                  |  |  |  |  |  |
|------|-----------|------|--------|-----------------|------------------|------------------|------------------|--|--|--|--|--|
|      | Total     | Ger  | nder   | Grade           |                  |                  |                  |  |  |  |  |  |
| Year | Total     | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |  |  |
| 2003 | 14.8      | 10.5 | 19.4   | 15.4            | 14.1             | 17.4             | 11.7             |  |  |  |  |  |
| 2005 | 12.4      | 9.8  | 15.1   | 15.7            | 15.0             | 10.4             | 8.5              |  |  |  |  |  |
| 2007 | 12.2      | 10.4 | 14.0   | 11.4            | 11.9             | 14.0             | 11.6             |  |  |  |  |  |
| 2009 | 13.9      | 12.1 | 15.9   | 13.0            | 15.2             | 15.1             | 13.0             |  |  |  |  |  |
| 2011 | 10.1      | 7.9  | 12.4   | 12.0            | 10.0             | 8.7              | 9.3              |  |  |  |  |  |

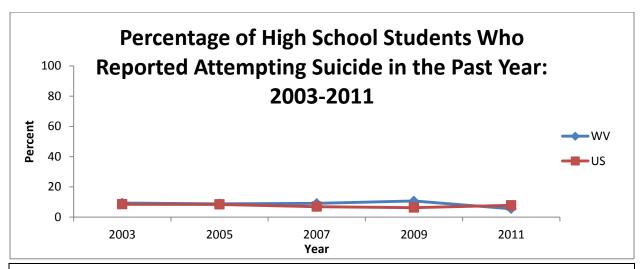
#### **United States**

|      | Total | Ger  | nder   |                 | Gra              | ade              |                  |
|------|-------|------|--------|-----------------|------------------|------------------|------------------|
| Year | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |
| 2003 | 16.5  | 14.1 | 18.9   | 17.7            | 16.3             | 16.2             | 14.9             |
| 2005 | 13.0  | 9.9  | 16.2   | 13.9            | 14.1             | 12.9             | 10.5             |
| 2007 | 11.3  | 9.2  | 13.4   | 11.2            | 12.5             | 10.4             | 10.6             |
| 2009 | 10.9  | 8.6  | 13.2   | 10.8            | 11.7             | 11.3             | 9.2              |
| 2011 | 12.8  | 10.8 | 15.0   | 13.6            | 14.4             | 11.9             | 10.7             |

Source: YRBS

Notes: Made a plan about how you would attempt suicide during the past 12 months.

In 2011, high school students in West Virginia were significantly less likely to have attempted suicide one or more times in the past year (5.5%) compared to the national rate (7.8%) (YRBS).



Percentage of High School Students Who Reported Attempting Suicide in the Past Year by Gender and Grade: 2003-2011

|      | West Virginia |      |        |                 |                  |                  |                  |  |  |  |  |  |
|------|---------------|------|--------|-----------------|------------------|------------------|------------------|--|--|--|--|--|
|      | Total         | Ger  | nder   | Grade           |                  |                  |                  |  |  |  |  |  |
| Year | Total         | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |  |  |  |  |
| 2003 | 9.3           | 6.0  | 12.8   | 10.3            | 9.1              | 9.8              | 6.4              |  |  |  |  |  |
| 2005 | 8.8           | 5.2  | 12.3   | 12.4            | 12.1             | 6.7              | 3.5              |  |  |  |  |  |
| 2007 | 9.1           | 6.7  | 11.4   | 9.0             | 7.4              | 9.8              | 9.9              |  |  |  |  |  |
| 2009 | 10.7          | 9.8  | 11.7   | 10.4            | 10.1             | 10.1             | 12.4             |  |  |  |  |  |
| 2011 | 5.5           | 4.8  | 6.2    | 7.0             | 5.7              | 4.5              | 4.7              |  |  |  |  |  |

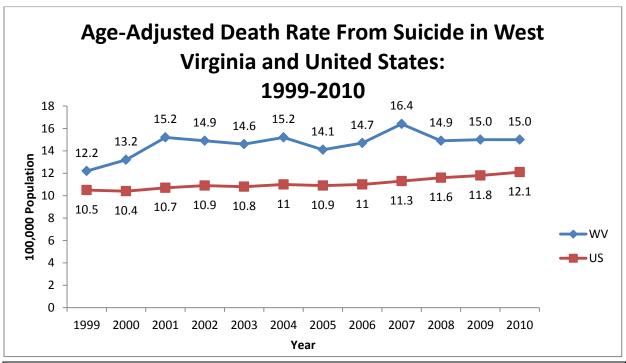
#### **United States**

|      | Total | Ger  | nder   | Grade           |                  |                  |                  |  |
|------|-------|------|--------|-----------------|------------------|------------------|------------------|--|
| Year | Total | Male | Female | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> |  |
| 2003 | 8.5   | 5.4  | 11.5   | 10.1            | 9.1              | 7.3              | 6.1              |  |
| 2005 | 8.4   | 6.0  | 10.8   | 10.4            | 9.1              | 7.8              | 5.4              |  |
| 2007 | 6.9   | 4.6  | 9.3    | 7.9             | 8.0              | 5.8              | 5.4              |  |
| 2009 | 6.3   | 4.6  | 8.1    | 7.3             | 6.9              | 6.3              | 4.2              |  |
| 2011 | 7.8   | 5.8  | 9.8    | 9.3             | 8.2              | 6.6              | 6.3              |  |

Source: YRBS

Notes: Attempted suicide one or more times during the past 12 months.

West Virginia has had a higher age-adjusted death rate for suicide than the United States from 1999 to 2010. Males in West Virginia had a significantly higher death rate than females for each year and for the combined years 1999-2010 (VSS).



|           | Age-Adjusted [ | Death Rate per | 100,000 Popul | ation From Sui | cide by Gender       | •     |
|-----------|----------------|----------------|---------------|----------------|----------------------|-------|
| Voor      |                | West Virginia  |               |                | <b>United States</b> |       |
| Year      | Female         | Male           | Total         | Female         | Male                 | Total |
| 1999      | 3.3            | 22.3           | 12.2          | 4              | 17.8                 | 10.5  |
| 2000      | 5.2            | 21.9           | 13.2          | 4              | 17.7                 | 10.4  |
| 2001      | 4.8            | 27.3           | 15.2          | 4.1            | 18.2                 | 10.7  |
| 2002      | 4.3            | 26.7           | 14.9          | 4.2            | 18.5                 | 10.9  |
| 2003      | 4.6            | 25.6           | 14.6          | 4.2            | 18.1                 | 10.8  |
| 2004      | 5.1            | 26.2           | 15.2          | 4.5            | 18.1                 | 11    |
| 2005      | 4.9            | 24.4           | 14.1          | 4.4            | 18.1                 | 10.9  |
| 2006      | 6.0            | 24.0           | 14.7          | 4.5            | 18.1                 | 11    |
| 2007      | 5.2            | 28.5           | 16.4          | 4.6            | 18.5                 | 11.3  |
| 2008      | 6.5            | 24.2           | 14.9          | 4.8            | 19                   | 11.6  |
| 2009      | 5.2            | 25.3           | 15.0          | 4.9            | 19.2                 | 11.8  |
| 2010      | 3.9            | 27.0           | 15.0          | 5              | 19.8                 | 12.1  |
| 1999-2010 | 5.0            | 25.3           | 14.6          | 4.4            | 18.5                 | 11.1  |

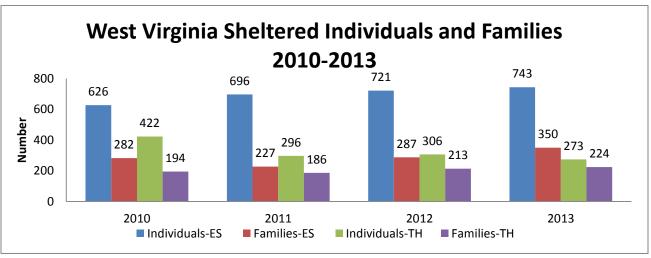
Source for WV: WV Health Statistics Center, Vital Statistics System. Source for US: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2010 on CDC WONDER Online Database, released January 2013. Data are compiled from Compressed Mortality File 1999-2010 Series 20 No. 2P, 2013. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Apr 24, 2013. ICD-10 codes: U03, X60-X84, Y87.0

#### Homelessness

<u>Indicator Description</u>: This indicator examines the prevalence of homelessness as well as mental illness and substance abuse of the homeless in West Virginia.

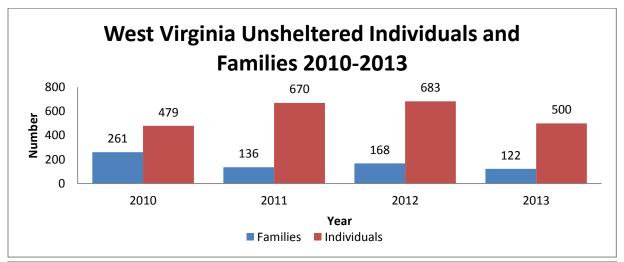
Why the Indicator is Important: It is important to examine the prevalence of substance abuse and use among the homeless population to help improve outreach, assessment, housing and create a safer environment to help end homelessness. According to the National Health Care for the Homeless Council by Zerger (2002), substance use and abuse prevalence among the homeless population is approximately 20-35% percent nationally, and approximately 10-20% who have both mental illness diagnoses and substance use and abuse. Less than one quarter of persons in the United States who are in need of substance abuse treatment in fact receive treatment, and for those who are homeless the barriers for treatment are even greater and therefore create a higher need for treatment.

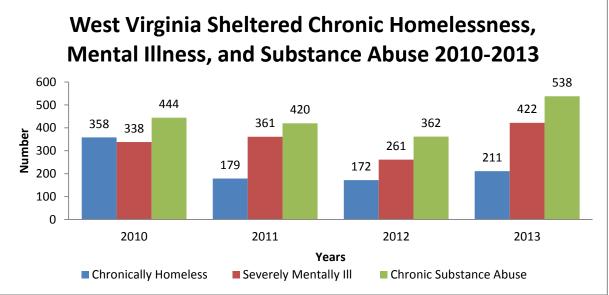
Data from the West Virginia Coalition to End Homelessness, Point in Time Count and Housing Inventory in 2013 indicated that among the homeless surveyed that 13.1% of the sheltered and 29% of the unsheltered homeless in West Virginia were chronic homelessness. There was an increase in reported chronic homelessness between 2012 and 2013: 22.7% increase among the sheltered and 4.6% increase among the unsheltered homeless. Also, 33.4% of the sheltered and 52.5% of the unsheltered homeless had chronic substance abuse. There was also an increase in the reported chronic substance abuse between 2012 and 2013: 48.6% increase among the sheltered and 67.5% increase among the unsheltered homeless. The results indicated that 26.2% of the sheltered and 32.8% of the unsheltered homeless had a severe mental illness in 2013. There was an increase in the reported severe mental illness between 2012 and 2013: 61.7% increase among the sheltered and 32.1% increase among the unsheltered homeless. Veterans accounted for 18.1% of the sheltered homeless and 5.9% of the unsheltered homeless in 2013.

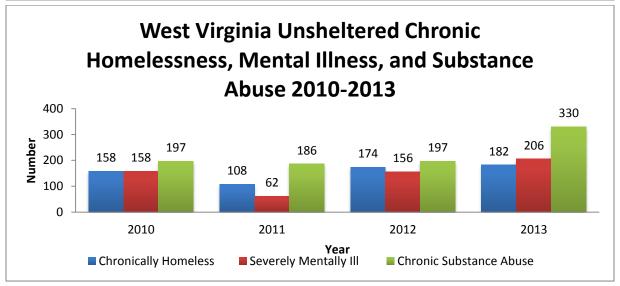


Source: West Virginia Coalition to End Homelessness, Annual Point in Time Count and Housing Inventory

Note: The Point-in-Time count occurs every year and is a census of all homeless persons in West Virginia. Cities all across West Virginia and nationwide participate in similar counts and report the data to the Department of Housing and Urban Development (HUD). ES= Emergency Shelter and TH= Transitional Housing

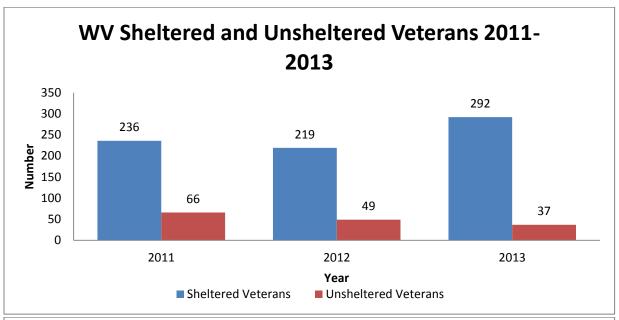


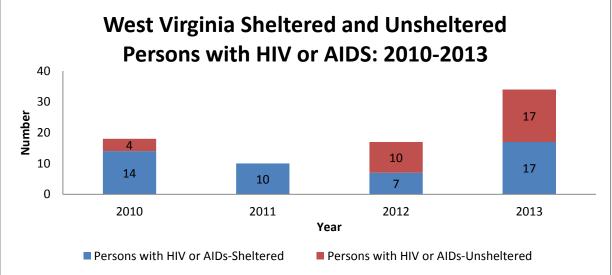


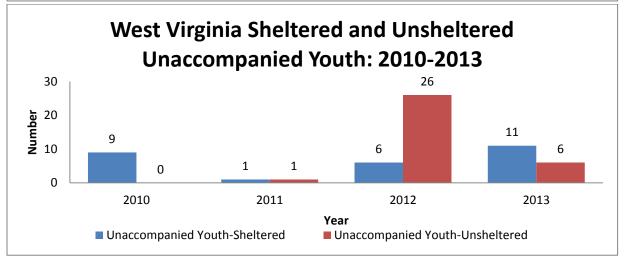


Source: West Virginia Coalition to End Homelessness, Annual Point in Time Count and Housing Inventory

Note: The Point-in-Time count occurs every year and is a census of all homeless persons in West Virginia. Cities all across West Virginia and nationwide participate in similar counts and report the data to the Department of Housing and Urban Development (HUD).







Source: West Virginia Coalition to End Homelessness, Annual Point in Time Count and Housing Inventory

Note: The Point-in-Time count occurs every year and is a census of all homeless persons in West Virginia. Cities all across West Virginia and nationwide participate in similar counts and report the data to the Department of Housing and Urban Development (HUD).



Source: West Virginia Coalition to End Homelessness, Annual Point in Time Count and Housing Inventory

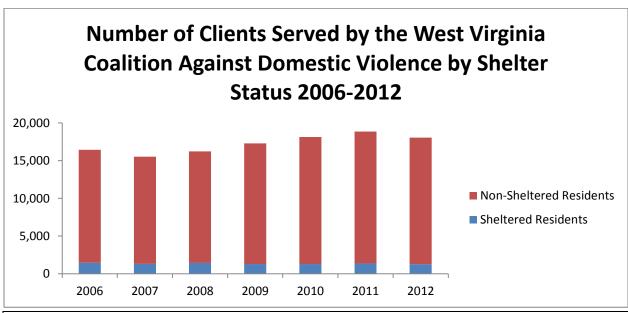
Note: The Point-in-Time count occurs every year and is a census of all homeless persons in West Virginia. Cities all across West Virginia and nationwide participate in similar counts and report the data to the Department of Housing and Urban Development (HUD).

#### **Domestic Violence**

<u>Indicator Description</u>: This indicator examines the scope of domestic violence prevalence in West Virginia and how it is correlated to substance abuse as well as mental health.

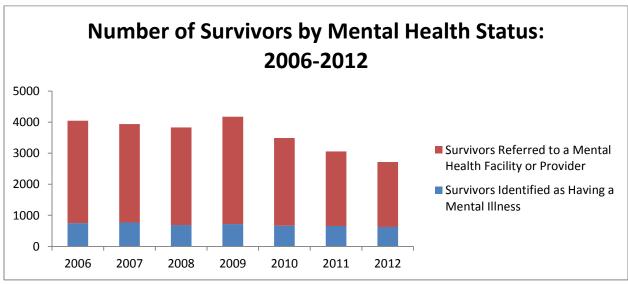
<u>Why Indicator is Important</u>: According to SAMSHA, domestic violence is defined as the use of intentional emotional, psychological, sexual, or physical force in order to control another by a family member or intimate partner. Research by SAMSHA found rates of one-fourth to one-half of male abusers have a substance abuse problem. Also, substance abuse by women increases their likelihood of being a victim of domestic violence. This indicator is important because it examines the relationship between domestic violence and substance abuse, which can be used to improve prevention efforts in domestic violence, substance abuse and mental health.

The West Virginia Coalition Against Domestic Violence (WVCADV) served 18,038 residents in 2012 and of these individuals they sheltered 1,276 residents. Over 52% of the survivors served by the coalition were between the ages of 18-49 in 2012 (23.5% of the survivors did not have a listed age in the WVCADV database). In 2012, 3.5% survivors were identified as having a mental illness and 11.6% were referred to a mental health facility or provider. Over 29.5% of the hours of services provided by the WVCADV were for case management. The veteran status of survivors served by the WVCADV in 2012 included 41 veterans, 9 enlisted in the military and 1 other.



| Number of Clients Serv                 | Number of Clients Served by the West Virginia Coalition Against Domestic Violence by Shelter Status: 2006-2012 |       |  |  |  |  |  |  |  |  |  |  |  |
|--|--|-------|--|--|--|--|--|--|--|--|--|--|--|
|  | 2006 2007 2008 2009 2010 2011 2012   |       |  |  |  |  |  |  |  |  |  |  |  |
| Sheltered Residents                    | Sheltered Residents 1,453 1,322 1,452 1,300 1,294 1,350 1,276  |       |  |  |  |  |  |  |  |  |  |  |  |
| Non-Sheltered Residents                | Non-Sheltered Residents 14,979 14,192 14,778 15,973 16,830 17,502 16,762                                       |       |  |  |  |  |  |  |  |  |  |  |  |
| Source: West Virginia Coalition Agains | st Domestic Vio  | lence |  |  |  |  |  |  |  |  |  |  |  |

| Age of Survivor       | s Served by t       | he West Vir      | ginia Coalitic | n Against Do | omestic Viole | ence by Shel | ter Status: |  |  |  |  |  |  |  |
|-----------------------|---------------------|------------------|----------------|--------------|---------------|--------------|-------------|--|--|--|--|--|--|--|
|                       | 2006-2012           |                  |                |              |               |              |             |  |  |  |  |  |  |  |
| Age                   | 2006                | 2007             | 2008           | 2009         | 2010          | 2011         | 2012        |  |  |  |  |  |  |  |
| Not Stated            | 3,857               | 3,459            | 3,692          | 3,807        | 3,873         | 4,734        | 4,230       |  |  |  |  |  |  |  |
| 1-12                  | 880                 | 961              | 1,051          | 1,197        | 1,484         | 1,651        | 1,612       |  |  |  |  |  |  |  |
| 13-17                 | 607                 | 501              | 528            | 479          | 526           | 587          | 573         |  |  |  |  |  |  |  |
| 18-29                 | 2,474               | 2,603            | 2,977          | 3,370        | 3,888         | 3,798        | 3,814       |  |  |  |  |  |  |  |
| 30-39                 | 3,449               | 3,314            | 3,323          | 3,684        | 3,632         | 3,609        | 3,365       |  |  |  |  |  |  |  |
| 40-49                 | 2,815               | 2,517            | 2,445          | 2,517        | 2,514         | 2,425        | 2,265       |  |  |  |  |  |  |  |
| 50-59                 | 1,499               | 1,360            | 1,305          | 1,365        | 1,364         | 1,368        | 1,289       |  |  |  |  |  |  |  |
| 60+                   | 845                 | 723              | 683            | 692          | 691           | 728          | 806         |  |  |  |  |  |  |  |
| Source: West Virginia | Coalition Against D | omestic Violence | 9              |              |               |              |             |  |  |  |  |  |  |  |

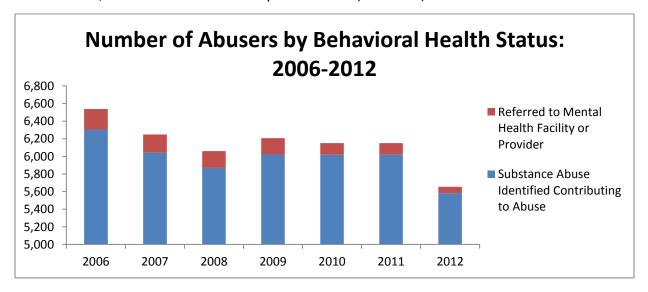


| Mental He   | Mental Health Status of Survivors: 2006-2012  |      |      |      |      |      |       |       |  |  |  |  |
|---|---|------|------|------|------|------|-------|-------|--|--|--|--|
| 2006 2007 2008 2009 2010 2011 2012  |   |      |      |      |      |      |       |       |  |  |  |  |
| <b>Survivors Identified as Having a</b> # 751 771 687 718 669 657 625   |   |      |      |      |      |      |       |       |  |  |  |  |
| Mental Illness  | Mental Illness         %         4.1%         4.4%         3.8%         3.7%         3.3%         3.5%         3.5% |      |      |      |      |      |       |       |  |  |  |  |
| Survivors Referred to a Mental  | #   | 3294 | 3167 | 3144 | 3456 | 2821 | 2,400 | 2,094 |  |  |  |  |
| Health Facility or Provider         %         17.9%         18.1%         17.2%         17.9%         14.0%         12.7%         11.6% |   |      |      |      |      |      |       |       |  |  |  |  |
| Source: West Virginia Coalition Against Domestic Viol   | ence  |      |      |      |      |      |       |       |  |  |  |  |

|   | Total H        | ours of Se | rvices Prov | vided |       |        |        |
|---|----------------|------------|-------------|-------|-------|--------|--------|
|   | 2006           | 2007       | 2008        | 2009  | 2010  | 2011   | 2012   |
| Crisis Counseling                           | 6098           | 4485       | 6381        | 6085  | 6095  | 7,690  | 6,621  |
| Follow-up                                   | 8703           | 12114      | 10771       | 11602 | 11049 | 11,468 | 6,758  |
| Therapy                                     | 2166           | 1721       | 1789        | 1516  | 1651  | 2,038  | 2,897  |
| Hotline Counseling                          | 3046           | 3418       | 3458        | 2903  | 3165  | 3,630  | 2,864  |
| Information & Referral                      | 3274           | 3433       | 4376        | 4441  | 4251  | 4,340  | 3,542  |
| Criminal Justice Advocacy                   | 1701           | 1657       | 1778        | 1692  | 1255  | 1,319  | 2,248  |
| Financial Assistance                        | 137            | 171        | 223         | 97    | 338   | 136    | 140    |
| Legal Advocacy                              | 7467           | 5439       | 6308        | 5465  | 5028  | 1901   | 1,122  |
| Victim Compensation                         | 16             | 76         | 61          | 36    | 1016  | 1,395  | 1,186  |
| Personal Advocacy                           | 10733          | 10181      | 12989       | 13446 | 11346 | 8,947  | 9,950  |
| Case Management                             | 33511          | 21943      | 24893       | 24984 | 24843 | 14,019 | 25,329 |
| Visitation/Exchange                         | 8006           | 5157       | 6597        | 4720  | 6423  | 8,585  | 9,980  |
| Safety Planning                             | 374            | 816        | 1547        | 1419  | 1508  | 1,985  | 3,127  |
| Civil Legal Advocacy                        | 1631           | 3486       | 4024        | 6234  | 7687  | 9,821  | 9,078  |
| Medical Advocacy                            | 221            | 232        | 347         | 271   | 358   | 301    | 1,121  |
| Source: West Virginia Coalition Against Dom | estic Violence |            |             |       |       |        |        |

| Veteran Status of Survivors Served: 2006-2012             |      |      |      |      |      |      |      |  |  |  |  |
|---|------|------|------|------|------|------|------|--|--|--|--|
|   | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |  |  |  |  |
| Veteran   | 30   | 31   | 38   | 35   | 32   | 29   | 41   |  |  |  |  |
| Enlisted  | 7    | 3    | 5    | 3    | 11   | 8    | 9    |  |  |  |  |
| Other   | 1    | 3    | 1    | 3    | 5    | 1    | 1    |  |  |  |  |
| Source: West Virginia Coalition Against Domestic Violence |      |      |      |      |      |      |      |  |  |  |  |

In 2012, substance abuse was identified as contributing to abuse in 45.7% of WVCADV cases and 0.7% were referred to a mental health facility or provider. Fifty-eight percent of the abusers were reported to be between the ages of 18-49 in 2012 (29.4% of the abusers did not have a listed age in the WVCADV database). The veteran status of the abusers in 2012 included 187 veterans, 39 enlisted in the military and 2 other (WVCADV).

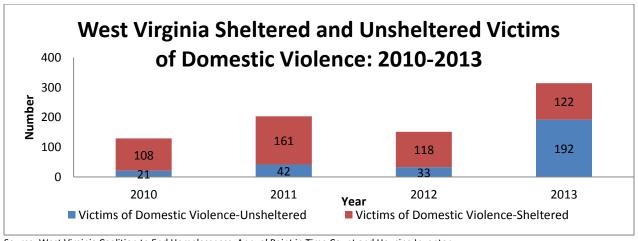


| Behavioral Health Status of Abusers: 2006-2012                     |  |          |       |       |       |       |       |       |  |  |  |  |
|--|--|----------|-------|-------|-------|-------|-------|-------|--|--|--|--|
|  | 2006 2007 2008 2009 2010 2011 2012                     |          |       |       |       |       |       |       |  |  |  |  |
| Substance Abuse Identified   | #  | 6,305    | 6,041 | 5,868 | 6,021 | 6,017 | 6,017 | 5,581 |  |  |  |  |
| Contributing to Abuse  | %  | 34.2%    | 34.5% | 32.2% | 31.2% | 29.9% | 29.9% | 45.7% |  |  |  |  |
| Referred to Mental Health  | Referred to Mental Health # 232 208 191 185 134 134 74 |          |       |       |       |       |       |       |  |  |  |  |
| <b>Facility or Provider</b> % 11.6% 10.4% 9.5% 9.2% 6.7% 6.7% 0.7% |  |          |       |       |       |       |       |       |  |  |  |  |
| Source: West Virginia Coalition Against D                          | omestic  | Violence |       |       |       |       |       |       |  |  |  |  |

|                    | Age of Abusers  |      |      |      |      |       |       |  |  |  |  |  |  |
|--------------------|---|------|------|------|------|-------|-------|--|--|--|--|--|--|
|                    | 2006  | 2007 | 2008 | 2009 | 2010 | 2011  | 2012  |  |  |  |  |  |  |
| Not Stated         | 5005  | 4726 | 4954 | 4713 | 4820 | 5,357 | 4,874 |  |  |  |  |  |  |
| 1-12               | 24  | 9    | 19   | 13   | 12   | 18    | 12    |  |  |  |  |  |  |
| 13-17              | 150   | 126  | 127  | 140  | 181  | 194   | 134   |  |  |  |  |  |  |
| 18-29              | 3942  | 3732 | 3759 | 4148 | 4251 | 4,139 | 3,598 |  |  |  |  |  |  |
| 30-39              | 3859  | 3776 | 4007 | 4003 | 4415 | 3,988 | 3,531 |  |  |  |  |  |  |
| 40-49              | 2749  | 2624 | 2469 | 2745 | 1798 | 2,740 | 2,546 |  |  |  |  |  |  |
| 50-59              | 1219  | 1256 | 1265 | 1189 | 1350 | 1,329 | 1,277 |  |  |  |  |  |  |
| 60+                | 481   | 480  | 437  | 475  | 537  | 579   | 625   |  |  |  |  |  |  |
| Source: West Virgi | Source: West Virginia Coalition Against Domestic Violence |      |      |      |      |       |       |  |  |  |  |  |  |

| Veteran Status of Abusers  |     |     |     |     |     |     |     |  |  |  |  |  |  |
|--|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|--|--|
| 2006         2007         2008         2009         2010         2011         2012 |     |     |     |     |     |     |     |  |  |  |  |  |  |
| Veteran  | 241 | 232 | 208 | 216 | 280 | 210 | 187 |  |  |  |  |  |  |
| <b>Enlisted</b> 46 34 35 38 40 32 39   |     |     |     |     |     |     |     |  |  |  |  |  |  |
| Other         20         28         36         45         47         4         2   |     |     |     |     |     |     |     |  |  |  |  |  |  |
| Source: West Virginia Coalition Against Domestic Violence                          |     |     |     |     |     |     |     |  |  |  |  |  |  |

According to the West Virginia Coalition to End Homelessness, Point in Time Count and Housing Inventory 11.9% of the sheltered homeless and 19.4% of the unsheltered homeless indicated they were victims of domestic violence. There was an increase in the reported domestic violence victims among the sheltered and unsheltered homeless population in West Virginia between 2012 and 2013: 481.8% increase among the unsheltered and 3.4% increase among the sheltered.



Source: West Virginia Coalition to End Homelessness, Annual Point in Time Count and Housing Inventory

Note: The Point-in-Time count occurs every year and is a census of all homeless persons in West Virginia. Cities all across West Virginia and nationwide participate in similar counts and report the data to the Department of Housing and Urban Development (HUD).

#### **Sexual Assault**

<u>Indicator Description</u>: This indicator examines the number of sexual assault offenses reported in West Virginia.

Why Indicator is Important: According to the CDC millions of women and men are affected by the serious public health problem of sexual violence. It is estimated that 1 in 5 women and 1 in 71 men have been raped in their lifetime. Almost 1 in 2 women and 1 in 5 men at some point in their lifetime have experienced other forms of sexual violence. Often statistics for sexual assault are under estimated due to many victims not reporting their assaults. There are many ways in which sexual violence impacts health such as: chronic pain, headaches, sexually transmitted diseases, depression, suicidal thoughts, fearfulness or anxiety, eating disorders, and difficulty trusting others.

There were 1,163 sexual assault offenses reported in West Virginia in 2011. The leading causes of sexual assault offenses in West Virginia were from forcible fondling (37.2%) and forcible rape (32.7%) in 2011 (WVIBRS).

| Number of Viol                | ent Offer   | ses Repo | rted in V | Vest Virgi | inia (2004 | 1-2011) |       |       |  |  |  |  |  |  |
|-------------------------------|---|----------|-----------|------------|------------|---------|-------|-------|--|--|--|--|--|--|
| Offense                       | Offense         2004         2005         2006         2007         2008         2009         2010         2011 |          |           |            |            |         |       |       |  |  |  |  |  |  |
| Forcible Rape                 | 371   | 323      | 373       | 362        | 366        | 367     | 398   | 380   |  |  |  |  |  |  |
| Forcible Sodomy               | 105   | 91       | 87        | 82         | 82         | 77      | 91    | 68    |  |  |  |  |  |  |
| Sexual Assault With An Object | 166   | 184      | 182       | 211        | 268        | 207     | 229   | 213   |  |  |  |  |  |  |
| Forcible Fondling             | 450   | 465      | 461       | 515        | 459        | 427     | 507   | 433   |  |  |  |  |  |  |
| Incest                        | 21  | 20       | 33        | 18         | 21         | 17      | 21    | 16    |  |  |  |  |  |  |
| Statutory Rape                | 119   | 114      | 85        | 81         | 80         | 74      | 67    | 53    |  |  |  |  |  |  |
| Sexual Assaults Total         | 1,232   | 1,197    | 1,221     | 1,269      | 1,276      | 1,169   | 1,313 | 1,163 |  |  |  |  |  |  |

Source: West Virginia Incident-Based Reporting System (WVIBRS)

Notes: Caution should be used when making year to year comparisons due to differences in reporting levels of agencies over time.

# **Acronym Glossary**

| Title   | Acronym    |
|---|------------|
| Alcohol Epidemiological Data System                           | AEDS       |
| Alcohol-Related Disease Impact                                | ARDI       |
| Behavioral Risk Factor Surveillance System                    | BRFSS      |
| Bureau for Behavioral Health and Health Facilities            | ВВННЕ      |
| CDC WONDER Online Database                                    | CDC WONDER |
| Centers for Disease Control and Prevention                    | CDC        |
| Fatality Analysis Reporting System                            | FARS       |
| National Institute on Alcohol Abuse and Alcoholism            | NIAAA      |
| National Survey on Drug Use and Health                        | NSDUH      |
| Pregnancy Risk Assessment Monitoring System                   | PRAMS      |
| Single State Authority  | SSA        |
| Smoking-Attributable Mortality, Morbidity, and Economic Costs | SAMMEC     |
| State Epidemiological Outcomes Workgroup                      | SEOW       |
| Substance Abuse and Mental Health Services Administration     | SAMHSA     |
| Treatment Episode Data Set                                    | TEDS       |
| Uniform Billing Database (UB)                                 | UB         |
| Vital Statistics System                                       | VSS        |
| West Virginia Coalition Against Domestic Violence             | WVCADV     |
| West Virginia Coalition to End Homelessness                   | WVCEH      |
| West Virginia Health Statistics Center                        | WVHSC      |
| West Virginia Incident-Based Reporting System                 | WVIBRS     |
| West Virginia Juvenile Justice Database                       | MANDB      |
| West Virginia Office of Epidemiology and Prevention Services  | OEPS       |
| West Virginia Poison Center                                   | WVPC       |
| West Virginia Prescription Drug Abuse Quitline                | WVPDAQ     |
| West Virginia Traffic Accident Database                       | WVTAD      |
| West Virginia Youth Tobacco Survey                            | YTS        |
| Youth Risk Behavioral Surveillance System                     | YRBS       |

# Appendix A

**TEDS Data** 

| Perce | centage of Total Treatment Admissions Reporting Alcohol as Their Primary Substance of Abuse: 2002-2010 |              |              |             |       |              |              |              |       |              |              |          |          | 2002-2 | 2010 |
|-------|--|--------------|--------------|-------------|-------|--------------|--------------|--------------|-------|--------------|--------------|----------|----------|--------|------|
|       |  |              |              |             |       | Wes          | t Virgi      | nia          |       |              |              |          |          |        |      |
| Year  | Total  | Ger          | nder         |             |       |              |              |              | Αę    | ge           |              |          |          |        |      |
|       |  | Male         | Female       | 12-17       | 18-20 | 21-25        | 26-30        | 31-35        | 36-40 | 41-45        | 46-50        | 51-55    | 56-60    | 61-65  | 66+  |
| 2002  | 56.6   | 67.3         | 32.7         | 1.9         | 4.5   | 7.1          | 10.9         | 11.3         | 18.4  | 20.7         | 15.4         | 6        | 2.3      | 1.1    | 0.4  |
| 2003  | 52.4   | 74.8         | 25           | 1.7         | 3.9   | 11.7         | 14.1         | 13.1         | 13.4  | 13.8         | 12.2         | 8.5      | 4        | 2.1    | 1.5  |
| 2004  | 48.7   | 76           | 23.8         | 2.7         | 5.4   | 13.2         | 12.9         | 12.6         | 14.9  | 15.1         | 9.9          | 6.3      | 4.1      | 1.6    | 1.2  |
| 2005  | 41.1   | 75.9         | 24           | 1.8         | 3.4   | 12.7         | 11.4         | 12.3         | 13.3  | 14.6         | 13.9         | 8.2      | 4.8      | 1.8    | 1.8  |
| 2006  | 42.1   | 77.3         | 22.5         | 1.2         | 3.9   | 12.9         | 13           | 12.4         | 13.3  | 15           | 12           | 7.8      | 4.8      | 2.1    | 1.6  |
| 2007  | 41   | 75           | 24.9         | 1.4         | 3.6   | 11.6         | 12.9         | 12.3         | 15    | 14.7         | 12.3         | 8        | 5.2      | 1.6    | 1.3  |
| 2008  | 41.3   | 76           | 23.9         | 1.7         | 3.9   | 11.7         | 14.1         | 13.1         | 13.4  | 13.8         | 12.2         | 8.5      | 4        | 2.1    | 1.5  |
| 2009  | 40.6   | 76           | 24           | 1.1         | 4     | 11.5         | 13.7         | 12.9         | 12.6  | 12.4         | 12.7         | 9.7      | 4.8      | 2.4    | 2.1  |
| 2010  | 28.4   | 74.1         | 25.9         | 4.2         | 7     | 17.6         | 19.2         | 15.5         | 11.8  | 8.2          | 7.5          | 4.8      | 2.9      | 0.8    | 0.6  |
|       | 1  |              |              | ı           |       | Unit         | ed Sta       | tes          |       |              |              |          |          |        |      |
|       | Total  |              | nder         |             | 1     |              | 1            | 1            | Ag    | ge           |              | 1        | 1        | 1      |      |
| Year  |  | Male         | Female       | 12-17       | 18-20 | 21-25        | 26-30        | 31-35        | 36-40 | 41-45        | 46-50        | 51-55    | 56-60    | 61-65  | 66+  |
| 2002  | 23.7   | 76.2         | 23.7         | 2.4         | 3.7   | 8.9          | 9            | 12           | 17.1  | 17.6         | 13.4         | 7.9      | 4.2      | 2      | 1.5  |
| 2003  | 23.1   | 75.4         | 24.6         | 2.5         | 3.8   | 9.3          | 8.9          | 11.8         | 15.9  | 17.8         | 13.6         | 8.2      | 4.4      | 2.1    | 1.6  |
| 2004  | 22.3   | 74.9         | 25.1         | 2.6         | 3.9   | 10           | 9.2          | 11.2         | 14.8  | 17.6         | 13.7         | 8.6      | 4.5      | 2.1    | 1.6  |
| 2005  | 21.7   | 75           | 25           | 2.4         | 3.8   | 10.2         | 9.5          | 10.7         | 13.7  | 17.5         | 14.3         | 9.1      | 4.8      | 2.3    | 1.6  |
| 2006  | 22.1   | 74.3         | 25.7         | 2.6         | 3.9   | 10.4         | 10           | 10.2         | 13.1  | 16.7         | 14.7         | 9.5      | 5        | 2.2    | 1.5  |
| 2007  | 22.7   | 73.7         | 26.3         | 2.7         | 4     | 10.4         | 10.4         | 9.8          | 12.7  | 16.2         | 15           | 9.6      | 5.2      | 2.2    | 1.5  |
| 2008  | 23.3   | 73.2         | 26.7         | 2.5         | 3.8   | 10.4         | 10.8         | 9.9          | 12.3  | 15.5         | 15.4         | 10.2     | 5.3      | 2.3    | 1.5  |
| 2009  | 23.3   | 73.1         | 26.9         | 2.3         | 3.7   | 10.3         | 11.1         | 10.1         | 11.9  | 14.5         | 15.7         | 10.6     | 5.5      | 2.4    | 1.6  |
| 2010  | 22.3   | 72.2         | 27.8         | 1.9         | 3.2   | 9.8          | 10.9         | 10.2         | 11.5  | 13.8         | 15.8         | 11.1     | 6.1      | 2.7    | 1.7  |
| Perce | ntage o  | f Total Tre  | eatment A    | dmissi      |       |              |              |              | Secon | dary D       | rug as       | Their P  | rimary   | Subst  | ance |
|       |  |              |              |             | 0     |              | e: 2002      |              |       |              |              |          |          |        |      |
|       | 1  |              |              |             |       | Wes          | t Virgi      | nia          |       |              |              |          |          |        |      |
| Year  | Total  |              | nder         |             |       |              |              |              | Ag    | i            |              |          |          |        |      |
| 2002  | 7.4  | Male         | Female       | 12-17       | 18-20 | 21-25        | 26-30        | 31-35        | 36-40 | 41-45        | 46-50        | 51-55    | 56-60    | 61-65  | 66+  |
| 2002  | 7.4<br>6.1   | 68.6<br>65   | 31.4         | 11.4<br>3.8 | 2.9   | 17.1<br>17.7 | 5.7          | 28.6<br>14.2 | 14.3  | 8.6          | 11.4<br>11.7 | 0<br>4.9 | 0<br>1.6 | 0      | 0    |
| 2003  |  |              | 34.6         |             | 8.7   |              | 18.4         | 14.2         | 10.7  | 1            | 9.8          | 3.8      | 0.3      | 0      | 0    |
| 2004  | 6.1<br>9.6   | 68.6<br>75.7 | 31.4<br>24.3 | 5.6<br>5.2  | 6.6   | 21.3<br>18.7 | 13.2<br>16.8 | 14.5         | 11.1  | 11.8<br>12.6 | 8.3          | 2.9      | 1.1      | 0      | 0.1  |
| 2005  | 11.5   | 73.7         | 26.7         | 3.5         | 6.6   | 17.2         | 17.7         | 16.3         | 10.8  | 14.1         | 8.5          | 4.1      | 1.1      | 0      | 0.1  |
| 2007  | 11.5   | 73.1         | 26.7         | 3.8         | 6     | 17.4         | 18.8         | 13.2         | 14.6  | 11.5         | 9.4          | 4.1      | 1.2      | 0.1    | 0.1  |
| 2007  | 8.4  | 74.6         | 25.3         | 3.8         | 6     | 17.4         | 18.4         | 14.2         | 10.7  | 11.3         | 11.7         | 4.9      | 1.6      | 0.1    | 0.1  |
| 2009  | 8.1  | 70.7         | 29.2         | 2.8         | 5.6   | 16           | 17.6         | 15.6         | 11.8  | 14           | 9            | 5.6      | 1.5      | 0.4    | 0    |
| 2010  | 13   | 70.7         | 29.2         | 0.7         | 2.6   | 10.8         | 12.8         | 12.3         | 13.9  | 13.7         | 13.9         | 9.7      | 5.5      | 2.3    | 1.8  |
| 2010  | 13   | 70.6         | 23.2         | 0.7         | 2.0   |              | ed Sta       | l .          | 13.5  | 13./         | 13.5         | 3.1      | ر. ر     | 2.3    | 1.0  |
|       |  | Gor          | nder         |             |       | Jiill        | .cu Jld      | LCS          | Ag    | 70           |              |          |          |        |      |
| Year  | Total  | Male         | Female       | 12-17       | 18-20 | 21-25        | 26-30        | 31-35        | 36-40 | 41-45        | 46-50        | 51-55    | 56-60    | 61-65  | 66+  |
| 2002  | 19.3   | 73.8         | 26.2         | 6           | 6.3   | 12.4         | 11.1         | 15.7         | 19.2  | 15.7         | 8.3          | 3.5      | 1.1      | 0.3    | 0.2  |
| 2002  | 18.5   | 73.7         | 26.2         | 5.5         | 6.1   | 12.4         | 10.8         | 14.6         | 18.4  | 16.5         | 9.3          | 3.9      | 1.3      | 0.4    | 0.2  |
| 2003  | 18   | 73.7         | 26.2         | 5.5         | 6.1   | 13.2         | 11.2         | 13.5         | 17    | 16.7         | 10.2         | 4.2      | 1.5      | 0.4    | 0.2  |
| 2004  | TO   | 15.1         | 20.2         | J.3         | 0.1   | 13.2         | 111.4        | 13.3         | T/    | 10./         | 10.2         | 4.4      | 1.3      | J U.4  | 0.5  |

| 2005  | 17.6 | 73.9 | 26.1 | 5.1 | 5.9 | 13.4 | 11.5    | 12.5 | 16   | 17.3 | 11   | 4.8 | 1.6 | 0.5 | 0.3 |
|---|------|------|------|-----|-----|------|---------|------|------|------|------|-----|-----|-----|-----|
| 2006  | 17.7 | 73.5 | 26.4 | 5.1 | 5.9 | 13.5 | 12.1    | 11.7 | 15.1 | 16.9 | 11.5 | 5.4 | 1.8 | 0.5 | 0.3 |
| 2007  | 18.1 | 72.8 | 27.2 | 5.1 | 5.9 | 13.3 | 12.8    | 10.9 | 14.3 | 16.3 | 12.4 | 5.9 | 2.1 | 0.6 | 0.2 |
| 2008  | 18.1 | 72.4 | 27.5 | 4.9 | 5.8 | 13.4 | 13.4    | 10.9 | 13.3 | 15.4 | 12.8 | 6.5 | 2.4 | 0.6 | 0.2 |
| 2009  | 18.3 | 72.9 | 27.1 | 4.5 | 5.6 | 13.4 | 13.7    | 11.1 | 12.6 | 14.5 | 13.3 | 7.2 | 2.7 | 0.8 | 0.3 |
| <b>2010</b> 18.1 72.1 27.8 4 5.3 13.1 13.7 11.5 11.8 13.7 13.6 7.9 3.1 0.9 0.3                          |      |      |      |     |     |      |         |      |      |      |      |     | 0.3 |     |     |
| Percentage of Total Treatment Admissions Reporting Cocaine (smoked) as Their Primary Substance of Abuse |      |      |      |     |     |      |         |      |      |      |      |     | use |     |     |
| by Gender and Age: 2002-2010  |      |      |      |     |     |      |         |      |      |      |      |     |     |     |     |
|   |      |      |      |     |     | Wes  | t Virgi | nia  |      |      |      |     |     |     |     |

|      | West Virginia |      |        |       |       |       |       |       |       |       |       |       |       |       |     |
|------|---------------|------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
|      |               | Ger  | nder   |       |       |       |       |       | Αg    | ge    |       |       |       |       |     |
| Year | Total         | Male | Female | 12-17 | 18-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-60 | 61-65 | 66+ |
| 2002 | NA            | NA   | NA     | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA  |
| 2003 | 0.1           | 0    | 100    | 0     | 0     | 0     | 25    | 25    | 25    | 0     | 25    | 0     | 0     | 0     | 0   |
| 2004 | 0.6           | 23.3 | 76.7   | 3.3   | 0     | 16.7  | 16.7  | 23.3  | 23.3  | 13.3  | 0     | 3.3   | 0     | 0     | 0   |
| 2005 | 1.9           | 34.6 | 64.9   | 1.6   | 3.2   | 18.6  | 11.2  | 19.1  | 21.3  | 13.3  | 8.5   | 2.1   | 0.5   | 0.5   | 0   |
| 2006 | 3.7           | 36.9 | 62.9   | 0.9   | 4.8   | 11    | 15.2  | 22.2  | 16.9  | 16.9  | 7.3   | 3.5   | 1.3   | 0     | 0   |
| 2007 | 2.6           | 45.3 | 54.7   | 0     | 1.3   | 10.5  | 21.2  | 16.9  | 20.1  | 14.2  | 9.4   | 4.6   | 1.1   | 0.8   | 0   |
| 2008 | 2.2           | 44   | 56     | 0     | 2.5   | 13.9  | 12.4  | 15.2  | 26    | 12.4  | 10.5  | 5.3   | 1.5   | 0     | 0.3 |
| 2009 | 2.1           | 36.3 | 63.7   | 0     | 1.6   | 6.8   | 20    | 17.4  | 17.9  | 16.3  | 13.2  | 5.8   | 1.1   | 0     | 0   |
| 2010 | 1.3           | 41.2 | 58.8   | 0     | 0     | 13.7  | 11.8  | 27.5  | 23.5  | 9.8   | 3.9   | 7.8   | 2     | 0     | 0   |

#### **United States**

|      |       | Gen  | nder   |       | Age   |       |       |       |       |       |       |       |       |       |     |
|------|-------|------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Year | Total | Male | Female | 12-17 | 18-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-60 | 61-65 | 66+ |
| 2002 | 9.5   | 58.5 | 41.5   | 0.6   | 2.0   | 6.7   | 11.2  | 21.1  | 25.9  | 19.1  | 8.8   | 3.1   | 0.9   | 0.3   | 0.1 |
| 2003 | 9.9   | 59.0 | 40.9   | 0.7   | 2.1   | 7.0   | 10.3  | 19.5  | 24.9  | 20.4  | 10.0  | 3.6   | 1.0   | 0.3   | 0.1 |
| 2004 | 9.9   | 58.4 | 41.5   | 0.6   | 2.1   | 7.1   | 10.1  | 17.7  | 23.6  | 21.2  | 11.4  | 4.1   | 1.2   | 0.4   | 0.1 |
| 2005 | 10.2  | 58.3 | 41.7   | 0.6   | 2.2   | 7.4   | 10.2  | 16.1  | 22.2  | 21.8  | 12.6  | 4.8   | 1.5   | 0.4   | 0.2 |
| 2006 | 10.1  | 57.9 | 42.1   | 0.7   | 2.3   | 7.8   | 10.5  | 14.3  | 20.8  | 21.7  | 13.8  | 5.5   | 1.8   | 0.5   | 0.2 |
| 2007 | 9.5   | 57.2 | 42.8   | 0.5   | 2.1   | 7.4   | 10.7  | 13.0  | 19.8  | 21.6  | 15.4  | 6.5   | 2.1   | 0.5   | 0.2 |
| 2008 | 8.3   | 56.1 | 43.9   | 0.5   | 1.8   | 6.8   | 10.5  | 11.9  | 18.8  | 21.5  | 16.8  | 7.7   | 2.6   | 0.7   | 0.2 |
| 2009 | 6.8   | 56.4 | 43.6   | 0.3   | 1.4   | 6.0   | 9.9   | 11.3  | 17.6  | 21.8  | 18.2  | 9.2   | 3.0   | 0.9   | 0.3 |
| 2010 | 5.8   | 56.9 | 43.1   | 0.3   | 1.2   | 5.3   | 9.2   | 11.2  | 15.8  | 20.9  | 19.0  | 10.6  | 3.6   | 0.9   | 0.3 |

Percentage of Total Treatment Admissions Reporting Cocaine (Other Route) as Their Primary Substance of Abuse by Gender and Age: 2002-2010

|  | West | Virginia |
|--|------|----------|
|--|------|----------|

|      |       | Ger  | nder   |       |       |       |        |       | Αg    | ge    |       |       |       |       |     |
|------|-------|------|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-----|
| Year | Total | Male | Female | 12-17 | 18-20 | 21-25 | 26-30  | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-60 | 61-65 | 66+ |
| 2002 | 5.3   | 48   | 48     | 0     | 8     | 16    | 20     | 16    | 12    | 24    | 0     | 0     | 0     | 4     | 0   |
| 2003 | 7.2   | 51   | 48.3   | 2.7   | 4.3   | 21.3  | 15.7   | 21    | 13.7  | 13    | 4.7   | 2.7   | 1     | 0     | 0   |
| 2004 | 8.1   | 49.3 | 50.4   | 1.6   | 3.9   | 17.8  | 21.3   | 18.4  | 17.1  | 10.8  | 6.3   | 2.4   | 0.3   | 0.3   | 0   |
| 2005 | 6.7   | 51.5 | 48.2   | 2.4   | 3.7   | 20.7  | 24.7   | 16.2  | 15.1  | 9.5   | 3.5   | 2.1   | 1.5   | 0.6   | 0   |
| 2006 | 6.3   | 53.4 | 46.2   | 2.6   | 7.2   | 18.3  | 18.8   | 16.7  | 13.7  | 12.6  | 7.5   | 1.9   | 0.6   | 0     | 0   |
| 2007 | 4.9   | 53.4 | 46.6   | 0.9   | 4     | 16.3  | 25.9   | 18.6  | 10.6  | 9.2   | 8.5   | 4     | 0.9   | 1     | 0   |
| 2008 | 3     | 52.8 | 47.2   | 0.2   | 6.2   | 12.6  | 21.7   | 16.6  | 13.1  | 14.2  | 10.4  | 3.8   | 0.9   | 0     | 0.2 |
| 2009 | 1.4   | 50   | 50     | 0     | 2.4   | 13.7  | 27.4   | 18.5  | 18.5  | 7.3   | 5.6   | 4     | 2.4   | 0     | 0   |
| 2010 | 1.3   | 63.3 | 36.7   | 2     | 6.1   | 10.2  | 30.6   | 24.5  | 14.3  | 4.1   | 4.1   | 4.1   | 0     | 0     | 0   |
|      |       |      |        |       |       | Unit  | ed Sta | 100   |       |       |       |       |       |       |     |

#### **United States**

| Year | rotai | Gender | Age |
|------|-------|--------|-----|
|------|-------|--------|-----|

|      |     | Male | Female | 12-17 | 18-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-60 | 61-65 | 66+ |
|------|-----|------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| 2002 | 3.5 | 67.0 | 33.0   | 2.7   | 5.1   | 12.8  | 13.9  | 18.8  | 20.8  | 14.8  | 7.0   | 2.5   | 0.9   | 0.2   | 0.1 |
| 2003 | 3.7 | 66.2 | 33.7   | 2.9   | 5.4   | 14.0  | 14.3  | 17.4  | 19.2  | 15.0  | 7.3   | 2.8   | 0.9   | 0.3   | 0.1 |
| 2004 | 3.9 | 66.0 | 33.9   | 3.2   | 5.7   | 14.3  | 14.6  | 16.8  | 17.4  | 15.1  | 8.1   | 3.0   | 0.9   | 0.3   | 0.1 |
| 2005 | 4.0 | 64.9 | 35.1   | 3.4   | 6.2   | 15.2  | 15.6  | 15.6  | 16.1  | 14.7  | 8.2   | 3.3   | 1.1   | 0.3   | 0.1 |
| 2006 | 4.1 | 64.1 | 35.9   | 3.7   | 6.6   | 16.0  | 16.9  | 14.6  | 15.0  | 13.6  | 8.3   | 3.6   | 1.2   | 0.3   | 0.1 |
| 2007 | 3.8 | 64.0 | 36.0   | 3.3   | 6.2   | 15.7  | 17.7  | 13.9  | 14.7  | 13.2  | 9.1   | 3.9   | 1.3   | 0.4   | 0.1 |
| 2008 | 3.3 | 64.5 | 35.5   | 2.7   | 5.6   | 14.8  | 17.7  | 14.4  | 14.4  | 13.7  | 9.7   | 4.6   | 1.5   | 0.4   | 0.2 |
| 2009 | 2.7 | 65.4 | 34.5   | 1.8   | 4.5   | 13.0  | 17.4  | 14.9  | 14.5  | 14.1  | 11.4  | 5.5   | 1.9   | 0.5   | 0.2 |
| 2010 | 2.4 | 67.0 | 33.0   | 1.9   | 4.0   | 12.1  | 16.7  | 15.0  | 14.0  | 14.1  | 11.7  | 6.5   | 2.2   | 0.6   | 0.2 |

Percentage of Total Treatment Admissions Reporting Marijuana as Their Primary Substance of Abuse by Gender and Age: 2002-2010

|      |       | Ger  | nder   |       |       |       |       |       | Ag    | ge    |       |       |       |       |     |
|------|-------|------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Year | Total | Male | Female | 12-17 | 18-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-60 | 61-65 | 66+ |
| 2002 | 17.2  | 64.2 | 35.8   | 34.6  | 8.6   | 12.3  | 12.3  | 12.3  | 11.1  | 7.4   | 0     | 0     | 1.2   | 0     | 0   |
| 2003 | 16.1  | 64   | 36     | 34.6  | 13.4  | 19.4  | 11.9  | 7.9   | 6.4   | 3.6   | 1.9   | 0.7   | 0     | 0     | 0   |
| 2004 | 16.3  | 66.6 | 33     | 34.1  | 12.8  | 18.4  | 11.7  | 7.2   | 7.5   | 4.2   | 2.9   | 0.5   | 0.5   | 0     | 0   |
| 2005 | 14.2  | 68.8 | 31.1   | 32.4  | 10.2  | 16.9  | 13.9  | 9.8   | 7.1   | 5     | 3.3   | 1.4   | 0.1   | 0     | 0   |
| 2006 | 12.4  | 66   | 33.8   | 25.9  | 12.2  | 20.4  | 16    | 9.3   | 6.7   | 4.5   | 2.3   | 1.7   | 0.8   | 0.1   | 0   |
| 2007 | 13.6  | 65.7 | 34     | 23.9  | 12    | 21.5  | 17.2  | 9.5   | 6.5   | 5.5   | 2.1   | 1.3   | 0.4   | 0     | 0   |
| 2008 | 13    | 63.8 | 36.1   | 23.3  | 12    | 19.6  | 15.4  | 9.6   | 8.4   | 5.6   | 3.6   | 1.4   | 0.7   | 0.2   | 0.2 |
| 2009 | 11.8  | 67.4 | 32.6   | 23.5  | 13.5  | 21    | 15.9  | 9.9   | 6.3   | 4     | 3.7   | 1.6   | 0.3   | 0.4   | 0   |
| 2010 | 12.3  | 66.1 | 33.9   | 24.3  | 16.8  | 17.9  | 10    | 10.9  | 7.7   | 5.3   | 5.5   | 0.9   | 0.4   | 0.2   | 0   |

#### **United States**

|      |       | Ger  | nder   |       |       |       |       |       | A٤    | ge    |       |       |       |       |     |
|------|-------|------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Year | Total | Male | Female | 12-17 | 18-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-60 | 61-65 | 66+ |
| 2002 | 15.3  | 75.5 | 24.5   | 34.4  | 16.2  | 19.6  | 10.3  | 7.4   | 5.6   | 3.5   | 1.7   | 0.6   | 0.2   | 0.0   | 0.0 |
| 2003 | 15.6  | 74.7 | 25.3   | 34.7  | 15.9  | 19.7  | 10.5  | 7.3   | 5.4   | 3.6   | 1.7   | 0.7   | 0.2   | 0.1   | 0.0 |
| 2004 | 15.8  | 74.1 | 25.8   | 32.7  | 15.6  | 20.5  | 11.2  | 7.4   | 5.3   | 3.9   | 2.0   | 0.8   | 0.3   | 0.1   | 0.0 |
| 2005 | 16.0  | 73.4 | 26.5   | 31.7  | 15.3  | 20.7  | 12.1  | 7.3   | 5.3   | 4.0   | 2.2   | 0.9   | 0.3   | 0.1   | 0.0 |
| 2006 | 16.0  | 73.5 | 26.5   | 30.9  | 15.0  | 20.4  | 12.8  | 7.5   | 5.3   | 4.0   | 2.3   | 0.9   | 0.3   | 0.1   | 0.0 |
| 2007 | 16.1  | 73.1 | 26.9   | 30.3  | 15.1  | 20.2  | 13.4  | 7.4   | 5.3   | 3.9   | 2.5   | 1.1   | 0.4   | 0.1   | 0.0 |
| 2008 | 17.3  | 73.4 | 26.6   | 30.4  | 15.2  | 19.9  | 13.6  | 7.5   | 5.2   | 3.8   | 2.5   | 1.1   | 0.4   | 0.1   | 0.1 |
| 2009 | 18.2  | 73.5 | 26.5   | 30.0  | 15.3  | 20.0  | 13.7  | 7.7   | 5.1   | 3.5   | 2.5   | 1.2   | 0.4   | 0.1   | 0.1 |
| 2010 | 18.6  | 73.2 | 26.8   | 28.4  | 14.7  | 19.8  | 13.8  | 8.2   | 5.2   | 3.5   | 2.6   | 1.3   | 0.5   | 0.1   | 0.1 |

Percentage of Total Admissions Reporting Heroin as Their Primary Substance of Abuse by Gender and Age: 2002-2010

# West Virginia

|      |       | Ger  | nder   |       |       |       |       |       | Αg    | ge    |       |       |       |       |     |
|------|-------|------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Year | Total | Male | Female | 12-17 | 18-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-60 | 61-65 | 66+ |
| 2002 | 0.4   | 100  | 0      | 50    | 0     | 50    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0   |
| 2003 | 2.6   | 47.2 | 52.8   | 1.9   | 17    | 35.8  | 20.8  | 12.3  | 6.6   | 1.9   | 3.8   | 0     | 0     | 0     | 0   |
| 2004 | 3.4   | 44.7 | 55.3   | 2.5   | 15.1  | 39    | 14.5  | 11.9  | 10.1  | 2.5   | 3.1   | 0.6   | 0.6   | 0     | 0   |
| 2005 | 3.9   | 51.3 | 48.5   | 1.5   | 12.1  | 44.3  | 27.6  | 7.2   | 3.6   | 0.8   | 2.3   | 0.5   | 0     | 0     | 0   |
| 2006 | 2.8   | 54.3 | 45.5   | 0.9   | 13.3  | 41.9  | 23.2  | 10.9  | 2.4   | 1.2   | 4.3   | 1.7   | 0.2   | 0     | 0   |
| 2007 | 2.1   | 50.7 | 49.3   | 1.3   | 6     | 34.9  | 31.2  | 11.1  | 7     | 3.4   | 3.4   | 1.7   | 0     | 0     | 0   |
| 2008 | 2.6   | 48.8 | 51.2   | 0.5   | 7.2   | 36    | 32.4  | 12.6  | 5.4   | 2.1   | 2.3   | 1.3   | 0.3   | 0     | 0   |

| 2009  | 3.1      | 55.3        | 44.7      | 0      | 9.2    | 38.3   | 28.7    | 11.3    | 7.1   | 2.5     | 1.1      | 1.1     | 0.4     | 0.4    | 0    |
|-------|----------|-------------|-----------|--------|--------|--------|---------|---------|-------|---------|----------|---------|---------|--------|------|
| 2010  | 4        | 45.4        | 54.6      | 0      | 9.2    | 30.9   | 32.2    | 11.8    | 9.2   | 2.6     | 2        | 1.3     | 0.7     | 0      | 0    |
|       | •        | •           | •         |        |        | Unit   | ed Sta  | tes     | ,     |         | ,        |         | •       |        |      |
|       |          | Ger         | nder      |        |        |        |         |         | Αį    | ge      |          |         |         |        |      |
| Year  | Total    | Male        | Female    | 12-17  | 18-20  | 21-25  | 26-30   | 31-35   | 36-40 | 41-45   | 46-50    | 51-55   | 56-60   | 61-65  | 66+  |
| 2002  | 15.1     | 68.3        | 31.6      | 0.5    | 4.2    | 13.2   | 12.8    | 16.0    | 17.7  | 15.9    | 11.3     | 5.4     | 1.6     | 0.5    | 0.2  |
| 2003  | 14.7     | 67.8        | 32.2      | 0.5    | 4.3    | 13.6   | 12.7    | 15.5    | 17.2  | 15.7    | 11.7     | 5.9     | 1.8     | 0.5    | 0.2  |
| 2004  | 14.5     | 68.0        | 32.0      | 0.5    | 4.4    | 14.7   | 13.3    | 14.6    | 16.2  | 15.6    | 11.5     | 6.1     | 2.0     | 0.6    | 0.2  |
| 2005  | 13.7     | 68.3        | 31.7      | 0.5    | 4.7    | 15.1   | 13.7    | 13.7    | 15.7  | 15.1    | 11.6     | 6.6     | 2.3     | 0.7    | 0.3  |
| 2006  | 13.7     | 67.5        | 32.5      | 0.5    | 4.7    | 15.7   | 14.6    | 12.6    | 14.8  | 14.4    | 11.6     | 7.2     | 2.8     | 0.7    | 0.3  |
| 2007  | 13.3     | 68.1        | 31.9      | 0.4    | 4.6    | 15.9   | 15.5    | 12.0    | 14.3  | 14.1    | 11.5     | 7.3     | 3.1     | 0.8    | 0.3  |
| 2008  | 13.7     | 67.3        | 32.6      | 0.5    | 5.2    | 17.1   | 16.3    | 11.6    | 12.9  | 13.2    | 11.1     | 7.4     | 3.3     | 0.9    | 0.3  |
| 2009  | 14.0     | 67.3        | 32.7      | 0.5    | 5.7    | 18.6   | 17.4    | 11.8    | 11.8  | 12.3    | 10.3     | 6.8     | 3.3     | 0.9    | 0.3  |
| 2010  | 13.9     | 66.6        | 33.4      | 0.5    | 5.7    | 19.3   | 18.0    | 12.0    | 10.6  | 10.9    | 9.6      | 6.6     | 3.4     | 1.0    | 0.3  |
| Perce | entage o | of Total A  | dmissions | Report | ing Ot | her Op | iates a | s Their | Prima | ry Subs | tance    | of Abus | se by G | ender  | and  |
|       |          |             |           |        |        | Age:   | 2002-2  | 010     |       |         |          |         |         |        |      |
|       |          |             |           |        |        | Wes    | t Virgi | nia     |       |         |          |         |         |        |      |
| Year  | Total    | Gender      |           |        |        |        |         |         | Αę    | ge      |          |         |         |        |      |
|       |          | Male        | Female    | 12-17  | 18-20  | 21-25  | 26-30   | 31-35   | 36-40 | 41-45   | 46-50    | 51-55   | 56-60   | 61-65  | 66+  |
| 2002  | 8.7      | 46.3        | 53.7      | 7.3    | 4.9    | 31.7   | 7.3     | 9.8     | 19.5  | 12.2    | 2.4      | 4.9     | 0       | 0      | 0    |
| 2003  | 11.5     | 53.3        | 46.7      | 5      | 7.1    | 28     | 23      | 14.6    | 8.8   | 8.6     | 3.1      | 0.4     | 0.6     | 0.4    | 0.2  |
| 2004  | 12.2     | 49.1        | 50.7      | 2.8    | 7.9    | 28.1   | 23.1    | 14.3    | 10.3  | 8.2     | 3.8      | 1.2     | 0       | 0.2    | 0    |
| 2005  | 16.6     | 50.2        | 49.6      | 2.1    | 7.5    | 26     | 22.8    | 16.5    | 10.7  | 5.6     | 5.1      | 2.4     | 0.7     | 0.4    | 0.1  |
| 2006  | 15.7     | 51          | 48.9      | 2.8    | 8      | 26.9   | 27      | 14      | 8     | 5.8     | 4.1      | 2.5     | 0.6     | 0.1    | 0.1  |
| 2007  | 20.2     | 49.7        | 50.2      | 3.1    | 6.5    | 27.4   | 26.1    | 15.9    | 8.7   | 5.1     | 4.1      | 2       | 0.8     | 0      | 0.2  |
| 2008  | 24.8     | 48.3        | 51.4      | 2      | 5.9    | 24.8   | 26.8    | 17.4    | 9.3   | 6.5     | 3.8      | 2.5     | 0.7     | 0.3    | 0.1  |
| 2009  | 28.1     | 49.2        | 50.7      | 1.4    | 6.8    | 23.8   | 26.8    | 19.1    | 9.7   | 5.4     | 4.1      | 1.7     | 0.9     | 0.2    | 0.1  |
| 2010  | 34.9     | 49.8        | 50.1      | 1.3    | 7.1    | 23     | 26      | 19.6    | 10.6  | 5.4     | 3.2      | 2.2     | 1.4     | 0.2    | 0    |
|       |          |             |           |        |        | Unit   | ed Sta  | tes     |       |         |          |         |         |        |      |
| Year  | Total    | Gender      | •         |        |        |        |         |         | Aε    | ge      |          |         |         |        |      |
|       |          | Male        | Female    | 12-17  | 18-20  | 21-25  | 26-30   | 31-35   | 36-40 | 41-45   | 46-50    | 51-55   | 56-60   | 61-65  | 66+  |
| 2002  | 2.4      | 53.5        | 46.5      | 1.5    | 5.2    | 14.9   | 14.6    | 15.6    | 15.6  | 14.9    | 10.3     | 4.5     | 1.4     | 0.5    | 0.4  |
| 2003  | 2.8      | 53.2        | 46.8      | 1.8    | 6.1    | 17.9   | 15.4    | 14.8    | 14.1  | 13.3    | 9.4      | 4.3     | 1.6     | 0.6    | 0.3  |
| 2004  | 3.4      | 53.0        | 46.9      | 1.8    | 6.7    | 19.7   | 16.4    | 14.5    | 12.6  | 12.4    | 8.8      | 4.4     | 1.6     | 0.5    | 0.4  |
| 2005  | 3.8      | 53.4        | 46.5      | 1.7    | 6.6    | 21.4   | 18.1    | 13.9    | 11.5  | 11.0    | 8.4      | 4.7     | 1.7     | 0.6    | 0.3  |
| 2006  | 4.3      | 53.5        | 46.4      | 1.7    | 6.6    | 22.7   | 19.7    | 13.3    | 11.0  | 10.1    | 7.9      | 4.5     | 1.7     | 0.5    | 0.3  |
| 2007  | 5.1      | 53.2        | 46.8      | 1.7    | 7.0    | 23.5   | 20.9    | 13.2    | 10.7  | 8.7     | 7.3      | 4.4     | 1.7     | 0.5    | 0.3  |
| 2008  | 6.0      | 52.8        | 47.1      | 2.0    | 7.4    | 23.7   | 22.6    | 13.3    | 9.7   | 7.9     | 6.6      | 4.2     | 1.7     | 0.5    | 0.2  |
| 2009  | 7.1      | 53.3        | 46.7      | 2.0    | 7.9    | 24.4   | 23.5    | 13.6    | 9.4   | 6.9     | 5.9      | 3.8     | 1.6     | 0.5    | 0.2  |
| 2010  | 8.7      | 53.4        | 46.6      | 1.7    | 8.1    | 24.9   | 23.7    | 14.0    | 8.6   | 6.2     | 5.2      | 3.6     | 1.6     | 0.5    | 0.2  |
| Perce | ntage o  | f Total Tre | eatment A | dmissi |        |        | -       | -       | -     | ) as Th | eir Prir | nary Sເ | ubstand | e of A | buse |
|       |          |             |           |        | by Ge  |        |         | 2002-   | 2010  |         |          |         |         |        |      |
|       | 1        | 1           |           | Г      |        | Wes    | t Virgi | nia     |       |         |          |         |         |        |      |
|       |          |             | nder      |        | 1      | 1      | 1       | 1       | Αę    | i       | 1        | 1       | 1       | 1      | 1    |
| Year  | Total    | Male        | Female    | 12-17  | 18-20  | 21-25  | 26-30   | 31-35   | 36-40 | 41-45   | 46-50    | 51-55   | 56-60   | 61-65  | 66+  |
| 2002  | NA       | NA          | NA        | NA     | NA     | NA     | NA      | NA      | NA    | NA      | NA       | NA      | NA      | NA     | NA   |
| 2003  | 0        | 0           | 100       | 0      | 0      | 0      | 0       | 0       | 100   | 0       | 0        | 0       | 0       | 0      | 0    |
| 2004  | 0        | 100         | 0         | 0      | 0      | 0      | 0       | 50      | 0     | 50      | 0        | 0       | 0       | 0      | 0    |

| 2005  | NA                       | NA          | NA        | NA     | NA      | NA      | NA       | NA      | NA      | NA         | NA     | NA      | NA     | NA      | NA   |
|-------|--------------------------|-------------|-----------|--------|---------|---------|----------|---------|---------|------------|--------|---------|--------|---------|------|
| 2006  | 0                        | 80          | 20        | 0      | 40      | 20      | 40       | 0       | 0       | 0          | 0      | 0       | 0      | 0       | 0    |
| 2007  | 0                        | 0           | 100       | 0      | 0       | 0       | 0        | 100     | 0       | 0          | 0      | 0       | 0      | 0       | 0    |
| 2008  | 0                        | 100         | 0         | 0      | 0       | 0       | 0        | 0       | 0       | 100        | 0      | 0       | 0      | 0       | 0    |
| 2009  | 0                        | 100         | 0         | 0      | 0       | 0       | 0        | 0       | 0       | 0          | 100    | 0       | 0      | 0       | 0    |
| 2010  | NA                       | NA          | NA        | NA     | NA      | NA      | NA       | NA      | NA      | NA         | NA     | NA      | NA     | NA      | NA   |
| 2010  | 147 (                    | 1471        | 1471      | 14/1   | 14/1    | l       | ed Stat  |         | 14/1    | 14/ (      | 14/ (  | 14/ (   | 14/ (  | 14/ (   | 14/1 |
|       |                          | Ger         | nder      |        |         | 0       | .ca ota  |         | Ag      | 7 <b>6</b> |        |         |        |         |      |
| Year  | Total                    | Male        | Female    | 12-17  | 18-20   | 21-25   | 26-30    | 31-35   | 36-40   | 41-45      | 46-50  | 51-55   | 56-60  | 61-65   | 66+  |
| 2002  | 0.2                      | 66.9        | 33.0      | 4.9    | 10.4    | 28.5    | 18.3     | 14.3    | 12.7    | 7.5        | 2.5    | 0.6     | 0.3    | 0.0     | 0.1  |
| 2003  | 0.2                      | 67.3        | 32.7      | 4.0    | 10.9    | 28.7    | 19.1     | 14.6    | 11.2    | 7.0        | 3.2    | 0.9     | 0.3    | 0.2     | 0.0  |
| 2004  | 0.2                      | 66.2        | 33.8      | 2.9    | 8.0     | 27.9    | 21.3     | 14.6    | 11.3    | 8.3        | 3.6    | 1.3     | 0.4    | 0.1     | 0.1  |
| 2005  | 0.2                      | 68.7        | 31.3      | 3.2    | 6.3     | 27.6    | 22.4     | 14.5    | 11.6    | 9.1        | 3.7    | 1.1     | 0.4    | 0.0     | 0.1  |
| 2006  | 0.1                      | 70.9        | 29.1      | 3.5    | 5.7     | 25.6    | 24.8     | 14.8    | 10.7    | 8.5        | 4.8    | 1.1     | 0.3    | 0.1     | 0.0  |
| 2007  | 0.2                      | 66.0        | 34.0      | 2.1    | 5.2     | 23.6    | 29.6     | 15.9    | 9.4     | 7.5        | 4.5    | 1.4     | 0.3    | 0.1     | 0.1  |
| 2008  | 0.2                      | 62.6        | 37.4      | 1.7    | 5.6     | 23.1    | 29.2     | 15.5    | 10.6    | 7.5        | 4.8    | 1.6     | 0.3    | 0.0     | 0.0  |
| 2009  | 0.2                      | 60.9        | 39.0      | 1.3    | 5.1     | 21.5    | 30.1     | 17.4    | 9.3     | 7.4        | 5.1    | 2.2     | 0.4    | 0.0     | 0.0  |
| 2010  | 0.3                      | 59.5        | 40.4      | 0.7    | 4.2     | 19.2    | 29.5     | 19.3    | 8.8     | 6.4        | 5.1    | 1.7     | 0.4    | 0.1     | 0.0  |
| Perc  | entage                   | of Total T  | reatment  | Admiss | sions R | eportir | ng Hallı | ucinoge | ens as  | Their P    | rimary | Substa  | nce of | Abuse   | by   |
|       | J                        |             |           |        |         | -       | l Age: 2 | _       |         |            | •      |         |        |         | •    |
|       |                          |             |           |        |         | Wes     | t Virgi  | nia     |         |            |        |         |        |         |      |
|       | West Virginia Gender Age |             |           |        |         |         |          |         |         |            |        |         |        |         |      |
| Year  | Total                    | Male        | Female    | 12-17  | 18-20   | 21-25   | 26-30    | 31-35   | 36-40   | 41-45      | 46-50  | 51-55   | 56-60  | 61-65   | 66+  |
| 2002  | 0.2                      | 100         | 0         | 100    | 0       | 0       | 0        | 0       | 0       | 0          | 0      | 0       | 0      | 0       | 0    |
| 2003  | 0.1                      | 80          | 20        | 0      | 40      | 20      | 20       | 20      | 0       | 0          | 0      | 0       | 0      | 0       | 0    |
| 2004  | 0.1                      | 60          | 40        | 20     | 40      | 40      | 0        | 0       | 0       | 0          | 0      | 0       | 0      | 0       | 0    |
| 2005  | 0.1                      | 100         | 0         | 0      | 14.3    | 85.7    | 0        | 0       | 0       | 0          | 0      | 0       | 0      | 0       | 0    |
| 2006  | 0.1                      | 76.9        | 23.1      | 0      | 53.8    | 15.4    | 15.4     | 15.4    | 0       | 0          | 0      | 0       | 0      | 0       | 0    |
| 2007  | 0                        | 100         | 0         | 0      | 0       | 100     | 0        | 0       | 0       | 0          | 0      | 0       | 0      | 0       | 0    |
| 2008  | 0.1                      | 66.7        | 33.3      | 44.4   | 22.2    | 22.2    | 11.1     | 0       | 0       | 0          | 0      | 0       | 0      | 0       | 0    |
| 2009  | 0                        | 66.7        | 33.3      | 0      | 0       | 33.3    | 0        | 0       | 0       | 0          | 66.7   | 0       | 0      | 0       | 0    |
| 2010  | 0.1                      | 75          | 25        | 25     | 25      | 25      | 0        | 0       | 0       | 25         | 0      | 0       | 0      | 0       | 0    |
|       | 1                        |             |           | Г      |         | Unit    | ed Sta   | tes     |         |            |        |         |        |         |      |
|       |                          |             | nder      |        | ı       | ı       | ı        |         | Ag      |            | ı      | ı       | ı      | ı       | ı    |
| Year  | Total                    | Male        | Female    | 12-17  | 18-20   | 21-25   | 26-30    | 31-35   | 36-40   | 41-45      | 46-50  | 51-55   | 56-60  | 61-65   | 66+  |
| 2002  | 0.1                      | 72.6        | 27.4      | 24.6   | 20.4    | 25.7    | 11.0     | 5.6     | 5.0     | 4.3        | 1.7    | 0.7     | 0.4    | 0.1     | 0.1  |
| 2003  | 0.1                      | 73.5        | 26.4      | 19.7   | 20.4    | 27.6    | 12.7     | 6.8     | 5.0     | 3.8        | 2.2    | 1.1     | 0.4    | 0.0     | 0.2  |
| 2004  | 0.1                      | 71.1        | 28.6      | 18.3   | 17.9    | 27.2    | 13.5     | 7.7     | 5.5     | 4.7        | 3.0    | 1.4     | 0.3    | 0.0     | 0.0  |
| 2005  | 0.1                      | 72.5        | 27.5      | 16.1   | 18.2    | 26.4    | 15.8     | 7.8     | 5.3     | 5.0        | 2.5    | 2.2     | 0.5    | 0.2     | 0.0  |
| 2006  | 0.1                      | 73.0        | 26.9      | 19.2   | 17.2    | 23.1    | 15.8     | 9.6     | 4.8     | 3.9        | 3.0    | 1.3     | 0.8    | 0.0     | 0.1  |
| 2007  | 0.1                      | 72.8        | 27.2      | 24.9   | 15.9    | 20.5    | 15.5     | 8.3     | 5.7     | 3.1        | 3.1    | 1.3     | 0.9    | 0.1     | 0.1  |
| 2008  | 0.1                      | 72.2        | 27.8      | 22.2   | 16.6    | 22.1    | 15.4     | 9.3     | 5.9     | 3.3        | 2.6    | 1.2     | 0.4    | 0.3     | 0.0  |
| 2009  | 0.1                      | 71.2        | 28.8      | 23.5   | 16.9    | 20.5    | 16.0     | 8.9     | 5.0     | 3.4        | 3.2    | 1.8     | 0.2    | 0.3     | 0.1  |
| 2010  | 0.1                      | 71.0        | 29.0      | 17.2   | 17.1    | 20.5    | 17.2     | 10.6    | 5.4     | 4.3        | 3.2    | 1.7     | 1.3    | 0.1     | 0.0  |
| Perce | entage c                 | of Total Tr | eatment A | Admiss | ions Re | portin  | g Amp    | hetami  | ines as | Their F    | rimary | / Subst | ance o | t Abuse | e by |
|       |                          |             |           |        |         | -       |          |         |         |            | •      |         |        |         |      |
|       |                          |             |           |        |         | der and | Age: 2   | 2002-20 |         |            |        |         |        |         |      |
| Year  | Total                    |             | nder      |        |         | der and |          | 2002-20 |         |            |        |         |        |         |      |

| I  |  | Male   | Female   | 12-17   | 18-20  | 21-25   | 26-30  | 31-35   | 36-40   | 41-45  | 46-50   | 51-55  | 56-60   | 61-65  | 66+   |
|--|--|--|--|---|--|---|--|---|---|--|---|--|---|--|---|
| 2002   | 1.7  | 62.5   | 37.5   | 0   | 0  | 25  | 25   | 12.5  | 12.5  | 0  | 12.5  | 0  | 12.5  | 0  | 0   |
| 2003   | 1.4  | 45.6   | 52.6   | 3.5   | 12.3   | 24.6  | 19.3   | 17.5  | 5.3   | 14   | 1.8   | 1.8  | 0   | 0  | 0   |
| 2004   | 1.6  | 51.9   | 48.1   | 7.8   | 15.6   | 22.1  | 15.6   | 14.3  | 10.4  | 10.4   | 3.9   | 0  | 0   | 0  | 0   |
| 2005   | 2.7  | 52.8   | 46.8   | 7.2   | 7.2  | 28.3  | 21.9   | 19.2  | 7.9   | 3.4  | 4.2   | 0.8  | 0   | 0  | 0   |
| 2006   | 2.3  | 53.8   | 45.9   | 1.8   | 5.6  | 17.8  | 24.9   | 25.1  | 11.8  | 6.5  | 5   | 0.9  | 0   | 0.6  | 0   |
| 2007   | 1.8  | 51.7   | 47.9   | 2.3   | 6.6  | 17.8  | 25.5   | 22  | 13.5  | 7.3  | 2.3   | 1.2  | 0.8   | 0  | 0.8   |
| 2008   | 1.6  | 58.2   | 41.4   | 0.9   | 4.3  | 21.1  | 26.7   | 16.8  | 14.7  | 4.7  | 9.1   | 1.3  | 0.4   | 0  | 0   |
| 2009   | 1.3  | 50   | 50   | 0   | 1.8  | 15.8  | 24.6   | 22.8  | 10.5  | 10.5   | 9.6   | 4.4  | 0   | 0  | 0   |
| 2010   | 1.8  | 55.1   | 44.9   | 2.9   | 5.8  | 15.9  | 29   | 23.2  | 17.4  | 1.4  | 2.9   | 1.4  | 0   | 0  | 0   |
|  | I.   |  | I.   |   |  | Unit  | ed Sta   |   |   |  |   |  |   |  |   |
|  |  | Ger  | nder   |   |  |   |  |   | Αę  | ge   |   |  |   |  |   |
| Year   | Total  | Male   | Female   | 12-17   | 18-20  | 21-25   | 26-30  | 31-35   | 36-40   | 41-45  | 46-50   | 51-55  | 56-60   | 61-65  | 66+   |
| 2002   | 6.5  | 55.6   | 44.3   | 4.7   | 8.6  | 19.8  | 18.0   | 18.1  | 15.5  | 9.8  | 3.8   | 1.2  | 0.3   | 0.1  | 0.0   |
| 2003   | 7.2  | 55.4   | 44.6   | 4.9   | 8.5  | 20.6  | 17.8   | 17.6  | 14.7  | 10.0   | 4.1   | 1.2  | 0.4   | 0.1  | 0.0   |
| 2004   | 7.9  | 54.8   | 45.1   | 5.2   | 8.5  | 21.7  | 18.2   | 16.7  | 13.6  | 9.8  | 4.4   | 1.3  | 0.3   | 0.1  | 0.0   |
| 2005   | 9.1  | 54.0   | 46.0   | 4.9   | 8.4  | 22.0  | 19.0   | 16.0  | 13.0  | 9.9  | 4.7   | 1.4  | 0.4   | 0.1  | 0.0   |
| 2006   | 8.3  | 53.7   | 46.2   | 3.8   | 7.1  | 21.0  | 20.1   | 15.8  | 13.6  | 10.6   | 5.5   | 1.8  | 0.5   | 0.1  | 0.0   |
| 2007   | 7.6  | 54.0   | 45.9   | 3.1   | 6.2  | 20.0  | 20.6   | 15.7  | 14.3  | 10.9   | 6.2   | 2.1  | 0.6   | 0.1  | 0.0   |
| 2008   | 6.3  | 54.5   | 45.5   | 2.3   | 5.1  | 18.3  | 21.2   | 16.2  | 14.7  | 11.3   | 7.1   | 2.7  | 0.7   | 0.2  | 0.0   |
| 2009   | 5.8  | 53.4   | 46.5   | 2.5   | 5.0  | 17.5  | 21.7   | 16.8  | 14.3  | 11.1   | 7.2   | 2.8  | 0.8   | 0.2  | 0.1   |
| 2010   | 6.1  | 52.7   | 47.2   | 2.6   | 4.9  | 16.9  | 21.7   | 17.4  | 14.1  | 10.6   | 7.3   | 3.1  | 0.9   | 0.2  | 0.1   |
| Per  | centage  | of Total T   | reatment   | Admis   |  | -   | _  | -   |   | heir Pr  | rimary  | Substa   | nce of  | Abuse  | by  |
|  |  |  |  |   | Gana   | ior and   | 1 / (20 - 2  | 1007_71   | าาก   |  |   |  |   |  |   |
|  |  |  |  |   | Gend   |   |  | 2002-20<br>nia  | 010   |  |   |  |   |  |   |
|  |  | Ger  | nder   |   | Geno   |   | l Age: 2<br>st Virgi   |   |   | re   |   |  |   |  |   |
| Year   | Total  |  | nder<br>Female   | 12-17   | Geno   | Wes   |  |   | 010<br>Ag<br>36-40  |  | 46-50   | 51-55  | 56-60   | 61-65  | 66+   |
| Year<br>2002   | Total  | Male   | Female   |   |  |   | t Virgi  | nia<br>31-35  | <b>A</b> §  | 41-45  | <b>46-50</b>  | 51-55<br>O   |   | 61-65  |   |
| 2002   | 0.9  | Male<br>50   | Female<br>50   | 12-17<br>0<br>20  | 18-20  | Wes   | 26-30<br>0   | 31-35<br>25   | Ag  | <b>41-45</b> 50  |   | 51-55<br>0<br>0  | 56-60<br>0  |  | 66+<br>0  |
|  |  | Male   | Female   | 0   | <b>18-20</b>   | <b>Wes 21-25</b> 0  | t Virgi  | nia<br>31-35  | <b>Ag</b><br><b>36-40</b><br>25   | 41-45  | 0   | 0  | 0   | 0  | 0   |
| 2002<br>2003   | 0.9<br>1.1   | <b>Male</b> 50 53.3  | <b>Female</b> 50 46.7  | 0<br>20   | 18-20<br>0<br>4.4  | 21-25<br>0<br>17.8  | 26-30<br>0<br>15.6   | 31-35<br>25<br>8.9  | <b>A</b> g<br>36-40<br>25<br>6.7  | 41-45<br>50<br>17.8  | 0 8.9   | 0  | 0   | 0  | 0   |
| 2002<br>2003<br>2004   | 0.9<br>1.1<br>1.5  | <b>Male</b> 50 53.3 49.3   | 50<br>46.7<br>50.7<br>55.1   | 0<br>20<br>7.2  | 18-20<br>0<br>4.4<br>10.1  | 21-25<br>0<br>17.8<br>23.2<br>22.4  | 26-30<br>0<br>15.6<br>8.7  | 31-35<br>25<br>8.9<br>15.9  | Ag<br>36-40<br>25<br>6.7<br>10.1<br>6.3   | 41-45<br>50<br>17.8<br>10.1  | 0<br>8.9<br>10.1<br>6.3   | 0<br>0<br>2.9  | 0<br>0<br>1.4   | 0 0 0  | 0 0 0   |
| 2002<br>2003<br>2004<br>2005   | 0.9<br>1.1<br>1.5<br>2.1   | Male<br>50<br>53.3<br>49.3<br>44.4   | 50<br>46.7<br>50.7   | 0<br>20<br>7.2<br>7.8   | 18-20<br>0<br>4.4<br>10.1<br>8.3   | 21-25<br>0<br>17.8<br>23.2  | 26-30<br>0<br>15.6<br>8.7  | 31-35<br>25<br>8.9<br>15.9<br>12.7  | Ag<br>36-40<br>25<br>6.7<br>10.1  | 41-45<br>50<br>17.8<br>10.1<br>7.3   | 0<br>8.9<br>10.1  | 0<br>0<br>2.9<br>3.4   | 0<br>0<br>1.4<br>3.9  | 0<br>0<br>0<br>1.5   | 0<br>0<br>0<br>0  |
| 2002<br>2003<br>2004<br>2005<br>2006   | 0.9<br>1.1<br>1.5<br>2.1<br>1.5  | Male<br>50<br>53.3<br>49.3<br>44.4<br>35.6   | 50<br>46.7<br>50.7<br>55.1<br>64.4   | 0<br>20<br>7.2<br>7.8<br>8.1  | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3  | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7  | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5  | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7  | Ag<br>36-40<br>25<br>6.7<br>10.1<br>6.3<br>15.8   | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3  | 0<br>8.9<br>10.1<br>6.3<br>5.4  | 0<br>0<br>2.9<br>3.4<br>0.9  | 0<br>0<br>1.4<br>3.9<br>5   | 0<br>0<br>0<br>1.5<br>0.5  | 0<br>0<br>0<br>1<br>0.9   |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007   | 0.9<br>1.1<br>1.5<br>2.1<br>1.5<br>1.6                                 | Male<br>50<br>53.3<br>49.3<br>44.4<br>35.6<br>38.3   | 50<br>46.7<br>50.7<br>55.1<br>64.4<br>61.7   | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4   | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8   | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7  | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4  | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7  | Ag<br>36-40<br>25<br>6.7<br>10.1<br>6.3<br>15.8   | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3  | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2   | 0<br>0<br>2.9<br>3.4<br>0.9<br>2.6   | 0<br>0<br>1.4<br>3.9<br>5<br>1.3  | 0<br>0<br>0<br>1.5<br>0.5  | 0<br>0<br>0<br>1<br>0.9<br>1.7  |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008   | 0.9<br>1.1<br>1.5<br>2.1<br>1.5<br>1.6                                 | Male<br>50<br>53.3<br>49.3<br>44.4<br>35.6<br>38.3<br>43.7                                   | 50<br>46.7<br>50.7<br>55.1<br>64.4<br>61.7<br>56.3   | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4<br>6.5  | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8   | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7  | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4<br>20.4  | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7<br>15.7  | 36-40<br>25<br>6.7<br>10.1<br>6.3<br>15.8<br>7.8<br>15.1  | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3<br>7.8   | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2<br>6.5  | 0<br>0<br>2.9<br>3.4<br>0.9<br>2.6<br>3.3  | 0<br>0<br>1.4<br>3.9<br>5<br>1.3  | 0<br>0<br>0<br>1.5<br>0.5<br>0   | 0<br>0<br>0<br>1<br>0.9<br>1.7<br>0.8   |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008<br>2009   | 0.9<br>1.1<br>1.5<br>2.1<br>1.5<br>1.6<br>1.6<br>2.2                   | Male<br>50<br>53.3<br>49.3<br>44.4<br>35.6<br>38.3<br>43.7<br>39.8                           | 50<br>46.7<br>50.7<br>55.1<br>64.4<br>61.7<br>56.3<br>60.2   | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4<br>6.5<br>5.1   | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8<br>9  | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7<br>18.4<br>23<br>15.2  | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4<br>20.4<br>15.8  | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7<br>15.7<br>8.6<br>11.7   | Ag<br>36-40<br>25<br>6.7<br>10.1<br>6.3<br>15.8<br>7.8<br>15.1  | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3<br>7.8<br>10.7   | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2<br>6.5<br>9.2   | 0<br>0<br>2.9<br>3.4<br>0.9<br>2.6<br>3.3<br>3.6   | 0<br>0<br>1.4<br>3.9<br>5<br>1.3<br>1.6<br>1.5  | 0<br>0<br>0<br>1.5<br>0.5<br>0<br>2<br>0.5   | 0<br>0<br>0<br>1<br>0.9<br>1.7<br>0.8   |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008<br>2009<br>2010   | 0.9<br>1.1<br>1.5<br>2.1<br>1.5<br>1.6<br>2.2<br>1.7                   | Male 50 53.3 49.3 44.4 35.6 38.3 43.7 39.8 19.7  | Female 50 46.7 50.7 55.1 64.4 61.7 56.3 60.2 80.3  | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4<br>6.5<br>5.1<br>1.5  | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8<br>9  | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7<br>18.4<br>23<br>15.2<br>Unit  | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4<br>20.4<br>15.8<br>18.2  | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7<br>15.7<br>8.6<br>11.7<br>13.6<br>tes  | Ag<br>36-40<br>25<br>6.7<br>10.1<br>6.3<br>15.8<br>7.8<br>15.1<br>13.3<br>12.1  | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3<br>7.8<br>10.7<br>6.1  | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2<br>6.5<br>9.2   | 0<br>0<br>2.9<br>3.4<br>0.9<br>2.6<br>3.3<br>3.6<br>6.1  | 0<br>0<br>1.4<br>3.9<br>5<br>1.3<br>1.6<br>1.5  | 0<br>0<br>0<br>1.5<br>0.5<br>0<br>2<br>0.5   | 0<br>0<br>0<br>1<br>0.9<br>1.7<br>0.8   |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008<br>2009<br>2010   | 0.9<br>1.1<br>1.5<br>2.1<br>1.5<br>1.6<br>1.6<br>2.2<br>1.7            | Male 50 53.3 49.3 44.4 35.6 38.3 43.7 39.8 19.7  Ger Male                                    | Female 50 46.7 50.7 55.1 64.4 61.7 56.3 60.2 80.3  | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4<br>6.5<br>5.1<br>1.5  | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8<br>9<br>5.1<br>10.6   | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7<br>18.4<br>23<br>15.2<br>Unit  | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4<br>20.4<br>15.8<br>18.2<br>red Star  | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7<br>15.7<br>8.6<br>11.7<br>13.6<br>tes  | Ag<br>36-40<br>25<br>6.7<br>10.1<br>6.3<br>15.8<br>7.8<br>15.1<br>13.3<br>12.1  | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3<br>7.8<br>10.7<br>6.1  | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2<br>6.5<br>9.2<br>6.1  | 0<br>0<br>2.9<br>3.4<br>0.9<br>2.6<br>3.3<br>3.6<br>6.1  | 0<br>0<br>1.4<br>3.9<br>5<br>1.3<br>1.6<br>1.5<br>6.1   | 0<br>0<br>1.5<br>0.5<br>0<br>2<br>0.5<br>1.5   | 0<br>0<br>0<br>1<br>0.9<br>1.7<br>0.8<br>0.5<br>3   |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008<br>2009<br>2010<br>Year<br>2002   | 0.9<br>1.1<br>1.5<br>2.1<br>1.5<br>1.6<br>2.2<br>1.7                   | Male 50 53.3 49.3 44.4 35.6 38.3 43.7 39.8 19.7  Ger Male 50.0                               | 50<br>46.7<br>50.7<br>55.1<br>64.4<br>61.7<br>56.3<br>60.2<br>80.3                                   | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4<br>6.5<br>5.1<br>1.5  | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8<br>9<br>5.1<br>10.6   | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7<br>18.4<br>23<br>15.2<br>Unit  | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4<br>20.4<br>15.8<br>18.2<br>26-30<br>10.5   | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7<br>15.7<br>8.6<br>11.7<br>13.6<br>tes  | Ag<br>36-40<br>25<br>6.7<br>10.1<br>6.3<br>15.8<br>7.8<br>15.1<br>13.3<br>12.1<br>Ag<br>36-40<br>15.4                                 | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3<br>7.8<br>10.7<br>6.1<br>41-45<br>14.5   | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2<br>6.5<br>9.2<br>6.1  | 0<br>0<br>2.9<br>3.4<br>0.9<br>2.6<br>3.3<br>3.6<br>6.1  | 0<br>0<br>1.4<br>3.9<br>5<br>1.3<br>1.6<br>1.5<br>6.1   | 0<br>0<br>1.5<br>0.5<br>0<br>2<br>0.5<br>1.5   | 0<br>0<br>0<br>1<br>0.9<br>1.7<br>0.8<br>0.5<br>3   |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008<br>2009<br>2010<br>Year<br>2002<br>2003                                 | 0.9 1.1 1.5 2.1 1.6 1.6 2.2 1.7  Total 0.4 0.4                         | Male 50 53.3 49.3 44.4 35.6 38.3 43.7 39.8 19.7  Ger Male 50.0 47.3                          | 50<br>46.7<br>50.7<br>55.1<br>64.4<br>61.7<br>56.3<br>60.2<br>80.3<br>60.2<br>80.3                   | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4<br>6.5<br>5.1<br>1.5  | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8<br>9<br>5.1<br>10.6<br>18-20<br>6.3<br>6.5                                    | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7<br>18.4<br>23<br>15.2<br>Unit  | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4<br>20.4<br>15.8<br>18.2<br>26-30<br>10.5<br>11.8   | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7<br>15.7<br>8.6<br>11.7<br>13.6<br>tes  | Ag<br>36-40<br>25<br>6.7<br>10.1<br>6.3<br>15.8<br>7.8<br>15.1<br>13.3<br>12.1<br>Ag<br>36-40<br>15.4<br>14.6                         | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3<br>7.8<br>10.7<br>6.1<br>se<br>41-45<br>14.5<br>14.2                                   | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2<br>6.5<br>9.2<br>6.1<br>46-50<br>10.9   | 0<br>0<br>2.9<br>3.4<br>0.9<br>2.6<br>3.3<br>3.6<br>6.1  | 0<br>0<br>1.4<br>3.9<br>5<br>1.3<br>1.6<br>1.5<br>6.1   | 0<br>0<br>0<br>1.5<br>0.5<br>0<br>2<br>0.5<br>1.5                                      | 0<br>0<br>0<br>1<br>0.9<br>1.7<br>0.8<br>0.5<br>3   |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008<br>2009<br>2010<br>Year<br>2002<br>2003<br>2004                         | 0.9 1.1 1.5 2.1 1.6 1.6 2.2 1.7  Total 0.4 0.4 0.5                     | Male 50 53.3 49.3 44.4 35.6 38.3 43.7 39.8 19.7  Ger Male 50.0 47.3 47.7                     | 50<br>46.7<br>50.7<br>55.1<br>64.4<br>61.7<br>56.3<br>60.2<br>80.3<br>60.2<br>80.3                   | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4<br>6.5<br>5.1<br>1.5  | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8<br>9<br>5.1<br>10.6<br>18-20<br>6.3<br>6.5<br>6.5                             | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7<br>18.4<br>23<br>15.2<br>Unit  | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4<br>20.4<br>15.8<br>18.2<br>26-30<br>10.5<br>11.8<br>12.1                                 | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7<br>15.7<br>8.6<br>11.7<br>13.6<br>tes<br>31-35<br>12.6<br>12.3                                 | Age 36-40 25 6.7 10.1 6.3 15.8 7.8 15.1 13.3 12.1 Age 36-40 15.4 14.6 13.6  | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3<br>7.8<br>10.7<br>6.1<br>41-45<br>14.5<br>14.2<br>14.8                                 | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2<br>6.5<br>9.2<br>6.1<br>46-50<br>10.9<br>12.1<br>11.8                               | 0<br>0<br>2.9<br>3.4<br>0.9<br>2.6<br>3.3<br>3.6<br>6.1<br>51-55<br>5.1<br>5.9                             | 0<br>0<br>1.4<br>3.9<br>5<br>1.3<br>1.6<br>1.5<br>6.1   | 0<br>0<br>1.5<br>0.5<br>0<br>2<br>0.5<br>1.5   | 0<br>0<br>0<br>1<br>0.9<br>1.7<br>0.8<br>0.5<br>3   |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008<br>2009<br>2010<br>Year<br>2002<br>2003<br>2004<br>2005                 | 0.9 1.1 1.5 2.1 1.5 1.6 1.6 2.2 1.7  Total 0.4 0.4 0.5 0.5             | Male 50 53.3 49.3 44.4 35.6 38.3 43.7 39.8 19.7  Ger Male 50.0 47.3 47.7 47.0                | Female 50 46.7 50.7 55.1 64.4 61.7 56.3 60.2 80.3  Mer Female 50.0 52.7 52.3 53.0                    | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4<br>6.5<br>5.1<br>1.5  | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8<br>9<br>5.1<br>10.6<br>18-20<br>6.3<br>6.5<br>6.2<br>6.3                      | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7<br>18.4<br>23<br>15.2<br>Unit<br>21-25<br>10.9<br>12.8<br>13.7<br>15.7                         | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4<br>20.4<br>15.8<br>18.2<br>26-30<br>10.5<br>11.8<br>12.1<br>14.8                         | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7<br>15.7<br>8.6<br>11.7<br>13.6<br>tes<br>31-35<br>12.6<br>12.3<br>12.4                         | Ag<br>36-40<br>25<br>6.7<br>10.1<br>6.3<br>15.8<br>7.8<br>15.1<br>13.3<br>12.1<br>Ag<br>36-40<br>15.4<br>14.6<br>13.6<br>12.6         | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3<br>7.8<br>10.7<br>6.1<br>41-45<br>14.5<br>14.2<br>14.8<br>12.8                         | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2<br>6.5<br>9.2<br>6.1<br>46-50<br>10.9<br>12.1<br>11.8<br>9.8                        | 0<br>2.9<br>3.4<br>0.9<br>2.6<br>3.3<br>3.6<br>6.1<br>51-55<br>5.1<br>5.9<br>5.7<br>6.3                    | 0<br>0<br>1.4<br>3.9<br>5<br>1.3<br>1.6<br>1.5<br>6.1<br>56-60<br>2.0<br>2.3<br>2.5<br>2.4                      | 0<br>0<br>1.5<br>0.5<br>0<br>2<br>0.5<br>1.5<br>61-65<br>1.2<br>1.0                    | 0<br>0<br>0<br>1<br>0.9<br>1.7<br>0.8<br>0.5<br>3   |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008<br>2009<br>2010<br>Year<br>2002<br>2003<br>2004<br>2005<br>2006         | 0.9 1.1 1.5 2.1 1.5 1.6 1.6 2.2 1.7  Total 0.4 0.4 0.5 0.5 0.5         | Male 50 53.3 49.3 44.4 35.6 38.3 43.7 39.8 19.7  Ger Male 50.0 47.3 47.7 47.0 47.8           | Female 50 46.7 50.7 55.1 64.4 61.7 56.3 60.2 80.3  The semale 50.0 52.7 52.3 53.0 52.2               | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4<br>6.5<br>5.1<br>1.5  | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8<br>9<br>5.1<br>10.6<br>18-20<br>6.3<br>6.5<br>6.2<br>6.3<br>6.2               | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7<br>18.4<br>23<br>15.2<br>Unit<br>21-25<br>10.9<br>12.8<br>13.7<br>15.7<br>16.2                 | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4<br>20.4<br>15.8<br>18.2<br>26-30<br>10.5<br>11.8<br>12.1<br>14.8<br>15.2                 | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7<br>15.7<br>8.6<br>11.7<br>13.6<br>tes<br>31-35<br>12.6<br>12.3<br>12.4<br>12.5                 | Ag<br>36-40<br>25<br>6.7<br>10.1<br>6.3<br>15.8<br>7.8<br>15.1<br>13.3<br>12.1<br>Ag<br>36-40<br>15.4<br>14.6<br>13.6<br>12.6<br>12.0 | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3<br>7.8<br>10.7<br>6.1<br>41-45<br>14.5<br>14.5<br>14.2<br>14.8<br>12.8<br>12.5         | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2<br>6.5<br>9.2<br>6.1<br>46-50<br>10.9<br>12.1<br>11.8<br>9.8<br>10.8                | 0<br>0<br>2.9<br>3.4<br>0.9<br>2.6<br>3.3<br>3.6<br>6.1<br>51-55<br>5.1<br>5.9<br>5.7<br>6.3<br>6.0        | 0<br>0<br>1.4<br>3.9<br>5<br>1.3<br>1.6<br>1.5<br>6.1<br>56-60<br>2.0<br>2.3<br>2.5<br>2.4<br>2.8               | 0<br>0<br>1.5<br>0.5<br>0<br>2<br>0.5<br>1.5<br>1.2<br>1.0<br>1.1<br>1.1               | 0<br>0<br>0<br>1<br>0.9<br>1.7<br>0.8<br>0.5<br>3<br>66+<br>1.2<br>0.9<br>0.8<br>0.7        |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008<br>2010<br>Year<br>2002<br>2003<br>2004<br>2005<br>2006<br>2007         | 0.9 1.1 1.5 2.1 1.5 1.6 1.6 2.2 1.7  Total 0.4 0.5 0.5 0.5 0.6         | Male 50 53.3 49.3 44.4 35.6 38.3 43.7 39.8 19.7  Ger Male 50.0 47.3 47.7 47.0 47.8 48.7      | Female 50 46.7 50.7 55.1 64.4 61.7 56.3 60.2 80.3  Merer Female 50.0 52.7 52.3 53.0 52.2 51.3        | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4<br>6.5<br>5.1<br>1.5<br>12-17<br>4.8<br>4.9<br>5.2<br>5.0<br>4.0        | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8<br>9<br>5.1<br>10.6<br>18-20<br>6.3<br>6.5<br>6.2<br>6.3<br>6.2<br>6.8        | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7<br>18.4<br>23<br>15.2<br>Unit<br>21-25<br>10.9<br>12.8<br>13.7<br>15.7<br>16.2<br>15.9         | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4<br>20.4<br>15.8<br>18.2<br>26-30<br>10.5<br>11.8<br>12.1<br>14.8<br>15.2<br>15.5         | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7<br>15.7<br>8.6<br>11.7<br>13.6<br>tes<br>31-35<br>12.6<br>12.3<br>12.4<br>12.5<br>12.0         | Age 36-40 25 6.7 10.1 6.3 15.8 7.8 15.1 13.3 12.1 Age 36-40 15.4 14.6 13.6 12.0 11.5  | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3<br>7.8<br>10.7<br>6.1<br>41-45<br>14.5<br>14.2<br>14.8<br>12.8<br>12.5<br>11.6         | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2<br>6.5<br>9.2<br>6.1<br>46-50<br>10.9<br>12.1<br>11.8<br>9.8<br>10.8                | 0<br>0<br>2.9<br>3.4<br>0.9<br>2.6<br>3.3<br>3.6<br>6.1<br>51-55<br>5.1<br>5.9<br>5.7<br>6.3<br>6.0<br>6.3 | 0<br>0<br>1.4<br>3.9<br>5<br>1.3<br>1.6<br>1.5<br>6.1<br>56-60<br>2.0<br>2.3<br>2.5<br>2.4<br>2.8<br>2.6        | 0<br>0<br>0<br>1.5<br>0.5<br>0<br>2<br>0.5<br>1.5<br>1.2<br>1.0<br>1.1<br>1.1          | 0<br>0<br>0<br>1<br>0.9<br>1.7<br>0.8<br>0.5<br>3<br>66+<br>1.2<br>0.9<br>0.8<br>0.7<br>0.6 |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008<br>2010<br>Year<br>2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008 | 0.9 1.1 1.5 2.1 1.5 1.6 1.6 2.2 1.7  Total 0.4 0.4 0.5 0.5 0.5 0.6 0.6 | Male 50 53.3 49.3 44.4 35.6 38.3 43.7 39.8 19.7  Ger Male 50.0 47.3 47.7 47.0 47.8 48.7 49.5 | Female 50 46.7 50.7 55.1 64.4 61.7 56.3 60.2 80.3  Mererel Female 50.0 52.7 52.3 53.0 52.2 51.3 50.5 | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4<br>6.5<br>5.1<br>1.5<br>12-17<br>4.8<br>4.9<br>5.2<br>5.0<br>4.0<br>5.1 | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8<br>9<br>5.1<br>10.6<br>18-20<br>6.3<br>6.5<br>6.2<br>6.3<br>6.2<br>6.8<br>7.8 | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7<br>18.4<br>23<br>15.2<br>Unit<br>21-25<br>10.9<br>12.8<br>13.7<br>15.7<br>16.2<br>15.9<br>17.2 | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4<br>20.4<br>15.8<br>18.2<br>26-30<br>10.5<br>11.8<br>12.1<br>14.8<br>15.2<br>15.5<br>17.1 | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7<br>15.7<br>8.6<br>11.7<br>13.6<br>tes<br>31-35<br>12.6<br>12.3<br>12.4<br>12.5<br>12.0<br>11.8 | Age 36-40 25 6.7 10.1 6.3 15.8 7.8 15.1 13.3 12.1  Age 36-40 15.4 14.6 13.6 12.0 11.5 10.8  | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3<br>7.8<br>10.7<br>6.1<br>41-45<br>14.5<br>14.2<br>14.8<br>12.8<br>12.5<br>11.6<br>10.5 | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2<br>6.5<br>9.2<br>6.1<br>46-50<br>10.9<br>12.1<br>11.8<br>9.8<br>10.8<br>10.7<br>8.9 | 0<br>0<br>2.9<br>3.4<br>0.9<br>2.6<br>3.3<br>3.6<br>6.1<br>51-55<br>5.1<br>5.9<br>5.7<br>6.3<br>6.0<br>6.3 | 0<br>0<br>1.4<br>3.9<br>5<br>1.3<br>1.6<br>1.5<br>6.1<br>56-60<br>2.0<br>2.3<br>2.5<br>2.4<br>2.8<br>2.6<br>2.8 | 0<br>0<br>1.5<br>0.5<br>0<br>2<br>0.5<br>1.5<br>1.2<br>1.0<br>1.1<br>1.1<br>0.8<br>1.0 | 0<br>0<br>0<br>1<br>0.9<br>1.7<br>0.8<br>0.5<br>3<br>                                       |
| 2002<br>2003<br>2004<br>2005<br>2006<br>2007<br>2008<br>2010<br>Year<br>2002<br>2003<br>2004<br>2005<br>2006<br>2007         | 0.9 1.1 1.5 2.1 1.5 1.6 1.6 2.2 1.7  Total 0.4 0.5 0.5 0.5 0.6         | Male 50 53.3 49.3 44.4 35.6 38.3 43.7 39.8 19.7  Ger Male 50.0 47.3 47.7 47.0 47.8 48.7      | Female 50 46.7 50.7 55.1 64.4 61.7 56.3 60.2 80.3  Merer Female 50.0 52.7 52.3 53.0 52.2 51.3        | 0<br>20<br>7.2<br>7.8<br>8.1<br>7.4<br>6.5<br>5.1<br>1.5<br>12-17<br>4.8<br>4.9<br>5.2<br>5.0<br>4.0        | 18-20<br>0<br>4.4<br>10.1<br>8.3<br>6.3<br>7.8<br>9<br>5.1<br>10.6<br>18-20<br>6.3<br>6.5<br>6.2<br>6.3<br>6.2<br>6.8        | 21-25<br>0<br>17.8<br>23.2<br>22.4<br>16.7<br>21.7<br>18.4<br>23<br>15.2<br>Unit<br>21-25<br>10.9<br>12.8<br>13.7<br>15.7<br>16.2<br>15.9         | 26-30<br>0<br>15.6<br>8.7<br>19<br>22.5<br>17.4<br>20.4<br>15.8<br>18.2<br>26-30<br>10.5<br>11.8<br>12.1<br>14.8<br>15.2<br>15.5         | 31-35<br>25<br>8.9<br>15.9<br>12.7<br>11.7<br>15.7<br>8.6<br>11.7<br>13.6<br>tes<br>31-35<br>12.6<br>12.3<br>12.4<br>12.5<br>12.0         | Age 36-40 25 6.7 10.1 6.3 15.8 7.8 15.1 13.3 12.1 Age 36-40 15.4 14.6 13.6 12.0 11.5  | 41-45<br>50<br>17.8<br>10.1<br>7.3<br>6.3<br>11.3<br>7.8<br>10.7<br>6.1<br>41-45<br>14.5<br>14.2<br>14.8<br>12.8<br>12.5<br>11.6         | 0<br>8.9<br>10.1<br>6.3<br>5.4<br>5.2<br>6.5<br>9.2<br>6.1<br>46-50<br>10.9<br>12.1<br>11.8<br>9.8<br>10.8                | 0<br>0<br>2.9<br>3.4<br>0.9<br>2.6<br>3.3<br>3.6<br>6.1<br>51-55<br>5.1<br>5.9<br>5.7<br>6.3<br>6.0<br>6.3 | 0<br>0<br>1.4<br>3.9<br>5<br>1.3<br>1.6<br>1.5<br>6.1<br>56-60<br>2.0<br>2.3<br>2.5<br>2.4<br>2.8<br>2.6        | 0<br>0<br>0<br>1.5<br>0.5<br>0<br>2<br>0.5<br>1.5<br>1.2<br>1.0<br>1.1<br>1.1          | 0<br>0<br>0<br>1<br>0.9<br>1.7<br>0.8<br>0.5<br>3<br>                                       |

| Pe       | Percentage of Total Treatment Admissions Reporting Sedatives as Their Primary Substance of Abuse by Gender and Age: 2002-2010 |              |              |            |          |              |              |              |              |        |          |            |       |       | У   |
|----------|---|--------------|--------------|------------|----------|--------------|--------------|--------------|--------------|--------|----------|------------|-------|-------|-----|
|          |   |              |              |            | Gend     |              |              |              | 010          |        |          |            |       |       |     |
|          |   | Gen          | dor          |            |          | wes          | t Virgi      | nıa          | Λ.           |        |          |            |       |       |     |
| Year     | Total   | Male         | Female       | 12-17      | 18-20    | 21-25        | 26-30        | 31-35        | Ag<br>36-40  | 41-45  | 46-50    | 51-55      | 56-60 | 61-65 | 66+ |
| 2002     | 0.4   | 50           | 50           | 0          | 0        | 50           | 0            | 0            | 0            | 0      | 50       | 0          | 0     | 01-03 | 0   |
| 2003     | 0.6   | 26.1         | 73.9         | 17.4       | 4.3      | 8.7          | 8.7          | 8.7          | 17.4         | 13     | 13       | 8.7        | 0     | 0     | 0   |
| 2004     | 0.5   | 37.5         | 62.5         | 25         | 8.3      | 8.3          | 12.5         | 8.3          | 25           | 4.2    | 8.3      | 0          | 0     | 0     | 0   |
| 2005     | 0.6   | 51.6         | 48.4         | 3.2        | 6.5      | 21           | 21           | 12.9         | 9.7          | 9.7    | 8.1      | 1.6        | 0     | 0     | 6.5 |
| 2006     | 0.8   | 45.6         | 53.5         | 7          | 7.9      | 19.3         | 18.4         | 14.9         | 16.7         | 4.4    | 6.1      | 5.3        | 0     | 0     | 0   |
| 2007     | 0.5   | 41.1         | 58.9         | 15.1       | 2.7      | 21.9         | 26           | 8.2          | 11           | 5.5    | 6.8      | 0          | 2.7   | 0     | 0   |
| 2008     | 1   | 48           | 52           | 4.7        | 10.8     | 14.9         | 12.8         | 23           | 8.1          | 8.8    | 10.1     | 2.7        | 1.4   | 2.7   | 0   |
| 2009     | 0.8   | 32           | 68           | 8          | 1.3      | 18.7         | 25.3         | 21.3         | 8            | 6.7    | 6.7      | 1.3        | 1.3   | 1.3   | 0   |
| 2010     | 0.7   | 33.3         | 66.7         | 3.7        | 14.8     | 7.4          | 29.6         | 14.8         | 7.4          | 7.4    | 7.4      | 3.7        | 3.7   | 0     | 0   |
|          |   |              |              |            |          | Unit         | ed Sta       | tes          |              |        |          |            |       |       |     |
|          |   | Gen          | 1            |            |          | Г            |              | Г            | Ag           |        | Г        | П          | Г     | 1     |     |
| Year     | Total   | Male         | Female       | 12-17      | 18-20    | 21-25        | 26-30        | 31-35        | 36-40        | 41-45  | 46-50    | 51-55      | 56-60 | 61-65 | 66+ |
| 2002     | 0.2   | 47.8         | 52.2         | 6.1        | 6.4      | 13.0         | 10.4         | 13.5         | 14.3         | 16.5   | 10.1     | 4.3        | 1.7   | 0.8   | 0.8 |
| 2003     | 0.2   | 47.9         | 52.1         | 6.5        | 5.8      | 13.9         | 13.3         | 13.1         | 14.2         | 14.6   | 10.0     | 4.7        | 1.9   | 0.8   | 0.9 |
| 2004     | 0.2   | 45.9         | 54.1         | 6.6        | 6.9      | 15.5         | 13.9         | 11.8         | 11.9         | 13.2   | 9.9      | 5.2        | 1.9   | 1.0   | 2.0 |
| 2005     | 0.2   | 44.2<br>42.7 | 55.8<br>57.2 | 5.7<br>7.5 | 6.2      | 15.8<br>16.3 | 13.3<br>13.5 | 12.7         | 12.0         | 11.5   | 10.1     | 5.4<br>5.9 | 2.4   | 1.5   | 3.0 |
| 2006     | 0.2   | 42.7         |              | 9.1        | 7.0      | 17.3         | 15.1         | 11.8<br>10.2 | 11.4<br>10.0 | 9.3    | 9.0      | 5.6        | 2.8   | 1.1   | 3.0 |
| 2007     | 0.2   | 41.2         | 57.6<br>58.8 | 7.8        | 6.6      | 16.9         | 15.1         | 12.1         | 9.7          | 9.5    | 9.0      | 5.4        | 2.8   | 1.4   | 3.0 |
| 2009     | 0.2   | 41.4         | 58.6         | 6.8        | 6.6      | 18.6         | 19.0         | 11.4         | 9.6          | 8.1    | 7.6      | 5.8        | 3.1   | 0.9   | 2.4 |
| 2010     | 0.2   | 44.2         | 55.8         | 5.8        | 6.7      | 16.6         | 17.4         | 13.1         | 10.4         | 7.3    | 8.6      | 5.7        | 3.5   | 1.7   | 2.7 |
| <b>—</b> | l l   |              | atment A     |            |          | l e          |              | l e          | l e          |        | l        | l .        | l e   | l .   | l e |
|          |   |              |              |            |          | and Age      |              |              |              | ·····• |          |            |       | ,     |     |
|          |   |              |              |            |          |              | t Virgi      |              |              |        |          |            |       |       |     |
|          |   | Gen          | der          |            |          |              |              |              | Αę           | e      |          |            |       |       |     |
| Year     | Total   | Male         | Female       | 12-17      | 18-20    | 21-25        | 26-30        | 31-35        | 36-40        | 41-45  | 46-50    | 51-55      | 56-60 | 61-65 | 66+ |
| 2002     | 0.4   | 50           | 50           | 0          | 0        | 0            | 0            | 50           | 0            | 50     | 0        | 0          | 0     | 0     | 0   |
| 2003     | 0.5   | 73.7         | 26.3         | 57.9       | 5.3      | 10.5         | 0            | 10.5         | 5.3          | 10.5   | 0        | 0          | 0     | 0     | 0   |
| 2004     | 0.3   | 75           | 25           | 41.7       | 8.3      | 0            | 25           | 8.3          | 8.3          | 0      | 8.3      | 0          | 0     | 0     | 0   |
| 2005     | 0.2   | 81.3         | 18.8         | 56.3       | 12.5     | 0            | 0            | 0            | 6.3          | 6.3    | 6.3      | 0          | 12.5  | 0     | 0   |
| 2006     | 0.2   | 81.8         | 18.2         | 42.4       | 12.1     | 6.1          | 6.1          | 9.1          | 6.1          | 3      | 9.1      | 0          | 6.1   | 0     | 0   |
| 2007     | 0.2   | 63.3         | 36.7         | 40         | 16.7     | 0            | 10           | 6.7          | 13.3         | 6.7    | 0        | 6.7        | 0     | 0     | 0   |
| 2008     | 0.2   | 86.2<br>60   | 13.8<br>40   | 51.7<br>30 | 6.9<br>0 | 0<br>10      | 0            | 10.3         | 13.8         | 6.9    | 6.9      | 3.4        | 0     | 0     | 0   |
| 2010     | 0.1   | 100          | 0            | 0          | 50       | 25           | 0            | 0            | 0            | 0      | 10<br>25 | 10         | 10    | 0     | 0   |
| 2010     | 0.1   | 100          | 1 0          | U          | _ 50     |              | ed Sta       | _            | U            | U      | 23       | U          | U     | L     | U   |
|          |   | Gen          | ıder         |            |          | 0            | cu sta       |              | Ag           | re     |          |            |       |       |     |
| Year     | Total   | Male         | Female       | 12-17      | 18-20    | 21-25        | 26-30        | 31-35        | 36-40        | 41-45  | 46-50    | 51-55      | 56-60 | 61-65 | 66+ |
| 2002     | 0.1   | 71.5         | 28.4         | 39.1       | 10.2     | 14.8         | 8.7          | 7.5          | 5.4          | 7.0    | 3.8      | 1.9        | 0.7   | 0.1   | 0.1 |
| 2003     | 0.1   | 73.7         | 26.2         | 42.9       | 7.0      | 14.9         | 8.8          | 6.5          | 7.6          | 5.6    | 4.3      | 1.6        | 0.5   | 0.2   | 0.0 |
| 2004     | 0.1   | 68.6         | 31.3         | 43.5       | 8.1      | 10.6         | 9.4          | 6.5          | 6.8          | 7.3    | 4.6      | 2.1        | 0.3   | 0.2   | 0.0 |
| 2005     | 0.1   | 65.0         | 35.0         | 35.0       | 7.6      | 11.4         | 10.3         | 8.5          | 8.1          | 7.0    | 6.3      | 3.2        | 1.4   | 0.4   | 0.2 |
| 2006     | 0.1   | 67.5         | 32.5         | 41.7       | 9.5      | 11.4         | 9.2          | 7.6          | 4.8          | 6.2    | 5.4      | 2.6        | 0.5   | 0.4   | 0.2 |

| 2007 | 0.1 | 64.3 | 35.5 | 43.6 | 10.3 | 10.3 | 10.4 | 6.0  | 5.6 | 5.5 | 4.8 | 1.7 | 1.1 | 0.1 | 0.0 |
|------|-----|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| 2008 | 0.1 | 63.5 | 36.5 | 38.7 | 8.7  | 11.4 | 10.5 | 8.0  | 7.6 | 6.0 | 3.8 | 2.9 | 8.0 | 0.1 | 0.1 |
| 2009 | 0.1 | 61.5 | 38.5 | 33.6 | 10.0 | 11.7 | 10.5 | 8.2  | 8.6 | 5.6 | 6.2 | 3.0 | 1.6 | 0.2 | 0.1 |
| 2010 | 0.1 | 60.7 | 39.3 | 28.3 | 10.6 | 13.0 | 11.1 | 10.4 | 7.0 | 5.6 | 7.1 | 3.5 | 1.7 | 0.3 | 0.0 |

Percentage of Total Treatment Admissions Reporting Other/Unknown as Their Primary Substance of Abuse by Gender and Age: 2002-2010 West Virginia

Gender

**Female** 

33.3

46.7

60.9

48.9

12-17

0

33.3

30.4

Male

66.7

53.3

39.1

51.1

|       |       | • |       |       |       |       |       |      |   |   |
|-------|-------|---|-------|-------|-------|-------|-------|------|---|---|
|       |       |   |       |       |       |       |       |      |   |   |
| 18-20 | 21-25 | 26-30                                   | 31-35 | 46-50 | 51-55 | 56-60 | 61-65 | 66+  |   |   |
| 0     | 0     | 0                                       | 0     | 0     | 33.3  | 0     | 33.3  | 33.3 | 0 | 0 |
| 6.7   | 13.3  | 0                                       | 20    | 13.3  | 0     | 0     | 13.3  | 0    | 0 | 0 |
| 4.3   | 17.4  | 8.7                                     | 4.3   | 17.4  | 8.7   | 4.3   | 0     | 4.3  | 0 | 0 |
|       |       |   |       |       |       |       |       |      |   |   |

2.1

8.5

#### 31.9 6.4 23.4 | 10.6 2.1 2006 0.5 39.4 60.6 16.9 1.4 21.1 18.3 16.9 9.9 9.9 2.8 1.4 1.4 0 0 2007 0.3 54.3 45.7 2.2 6.5 15.2 21.7 10.9 21.7 6.5 6.5 0 8.7 0 0 2008 0.2 32.4 67.6 5.9 14.7 17.6 17.6 17.6 5.9 5.9 5.9 2.9 5.9 0 0 2009 0.4 31.3 68.8 9.4 6.3 18.8 18.8 21.9 3.1 6.3 9.4 6.3 0 0 0 2010 0.4 50 50 21.4 7.1 21.4 7.1 14.3 7.1 7.1 7.1 7.1 0 0 0

#### **United States**

|      |       | Ger  | nder   |       |       |       |       |       | Αg    | ge    |       |       |       |       |     |
|------|-------|------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Year | Total | Male | Female | 12-17 | 18-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-60 | 61-65 | 66+ |
| 2002 | 3.6   | 62.3 | 37.6   | 18.7  | 6.8   | 12.4  | 11.3  | 12.2  | 13.2  | 11.0  | 7.3   | 3.7   | 1.8   | 0.8   | 0.6 |
| 2003 | 3.2   | 61.1 | 38.8   | 19.6  | 6.4   | 12.7  | 11.0  | 11.6  | 12.1  | 11.1  | 7.5   | 4.1   | 2.0   | 0.8   | 0.7 |
| 2004 | 3.3   | 58.3 | 41.5   | 15.8  | 6.5   | 13.0  | 11.5  | 12.0  | 12.2  | 12.0  | 8.2   | 4.5   | 2.4   | 1.0   | 8.0 |
| 2005 | 2.8   | 62.1 | 37.7   | 10.4  | 6.8   | 15.2  | 13.4  | 12.5  | 12.3  | 12.2  | 8.5   | 4.7   | 2.2   | 1.0   | 0.7 |
| 2006 | 2.7   | 60.0 | 39.7   | 10.5  | 7.0   | 15.4  | 14.0  | 11.9  | 11.8  | 11.6  | 8.6   | 4.9   | 2.4   | 1.0   | 0.6 |
| 2007 | 2.6   | 60.1 | 39.6   | 11.8  | 6.7   | 14.7  | 14.2  | 10.6  | 11.0  | 11.2  | 9.2   | 5.5   | 2.5   | 1.1   | 0.8 |
| 2008 | 2.5   | 59.2 | 40.7   | 12.5  | 6.8   | 14.5  | 14.3  | 10.3  | 10.4  | 10.4  | 9.2   | 6.0   | 2.8   | 1.1   | 1.2 |
| 2009 | 2.3   | 58.1 | 39.1   | 11.4  | 7.7   | 15.3  | 14.8  | 10.9  | 10.1  | 9.4   | 8.9   | 5.8   | 3.0   | 1.3   | 1.2 |
| 2010 | 2.4   | 57.9 | 37.2   | 9.9   | 7.9   | 16.3  | 14.5  | 11.0  | 9.7   | 9.6   | 8.9   | 6.0   | 3.2   | 1.3   | 1.1 |

Source: TEDS

Year

2002

2003

2004

2005

Total

0.6

0.4

0.5

0.5

Notes: NA = Data not available. "Alcohol only" category includes admissions for abuse of alcohol alone, with no secondary drug abuse. "Alcohol with Secondary Drug" category includes admissions for primary abuse of alcohol with secondary abuse of drugs. "Cocaine (smoked)" category includes admissions for smoked cocaine such as crack. "Cocaine (other route)" category includes admissions for cocaine taken by routes other than smoking. "Marijuana" category includes admissions for THC and any other cannabis sativa preparation. "Other opiates" category includes admissions for non-prescription use of methadone, codeine, morphine, oxycodone, hydromorphone, meperidine, opium, and other drugs with morphine-like effects. "PCP" category includes admissions for phencyclidine. Hallucinogens category includes admissions for lysergic acid diethylamide (LSD), dimethyltryptamine (DMT), dimethoxyphenylethylamine (STP), mescaline, psilocybin, peyote, etc. "Amphetamines" category includes methamphetamine and other amphetamines to include amphetamines, Benzedrine, Dexedrine, preludin, Ritalin and any other amines and related drugs. "Other stimulants" category includes admissions for all other stimulants. "Tranquilizers" category includes admissions for benzodiazepines, which include diazepam, flurazepam, chlordiazepoxide, clorazepate, lorazepam, alprazolam, oxazepam, temazepam, prazepam, triazolam, clonazepam, halazepam and other tranquilizers. "Sedatives" category includes admissions for barbiturates including phenobarbital, Seconal, Nembutal and other sedatives/hypnotics such as chloral hydrate, Placidyl, Doriden, etc. "Inhalants" category includes admissions for ether, glue, chloroform, nitrous oxide, gasoline, paint thinner, etc. "Other/unknown" category includes admissions for other or unknown substances not listed above.